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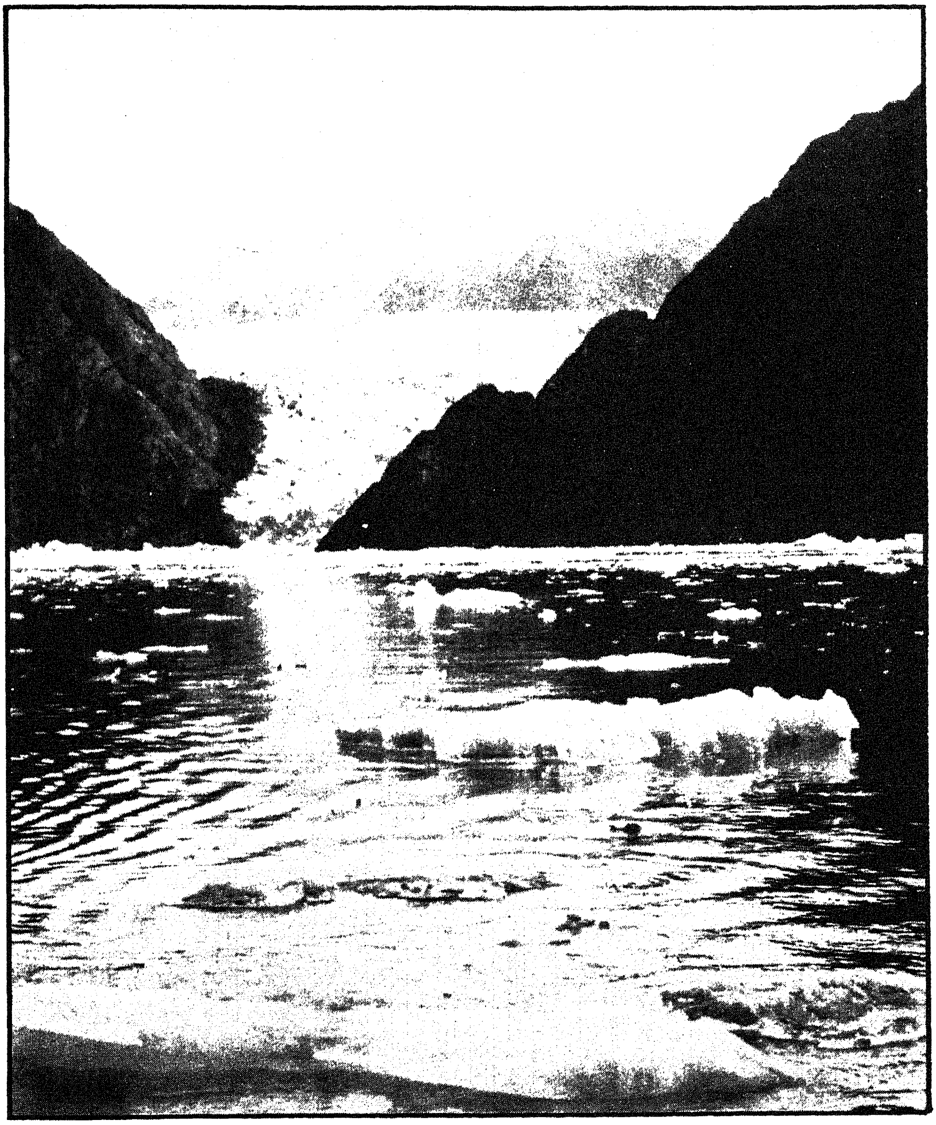
Final Environmental Impact Statement

Proposed Recreational Development and Independent Timber Sale

Gilbert Bay/Holkham Bay Area, Southeast Alaska

Part 1



FINAL ENVIRONMENTAL IMPACT STATEMENT
10038001

Proposed Recreational Development and Independent Timber Sale Gilbert Bay/Holkham Bay Area, Southeast Alaska

Lead Agency:	U.S. Department of Agriculture, Forest Service, P.O. Box 1980, Sitka, Alaska 99835
Cooperating Agencies:	Alaska Department of Fish and Game Anderson Wilson Building 210 Ferry Way Juneau, Alaska 99801
	U.S. Department of Commerce National Marine Fisheries Services 709 W. 9th Juneau, Alaska 99801
	U.S. Department of Interior U.S. Fish and Wildlife Service Sitka, Alaska 99835
Responsible Official:	John A. Sandor, Regional Forester Alaska Region (for National Forest lands)
For Further Information Contact:	Tom Walker Interdisciplinary Team Leader Tongass National Forest, Chatham Area Sitka, Alaska 99835 Phone (907) 747-6671

ABSTRACT

This Final Environmental Impact Statement describes three alternatives related to a proposed timber sale and six alternatives related to recreational development opportunities in the Gilbert/Holkham Bay areas of the Tongass National Forest in southeast Alaska. These alternatives have been prepared under the Tongass Land Management Plan (TLMP) allocation. Two No Action alternatives are included in the nine alternatives discussed. One of the No Action alternatives is related t the timber sale proposal, the other No Action alternative is related to the recreational development proposal. The estimated effects o implementing each of the alternatives are discussed. The Forest Service Recommended Action is identified and the rationale for thi selection presented.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

July, 1980

ERRATA

The following corrections should be made to the Final Environmental Impact Statement, Proposed Recreational Development and Independent Timber Sale, Gilbert Bay/Holkham Bay Area, Southeast Alaska, Part 1, Alaska Region Leaflet Number 107, July, 1980, published by the USDA Forest Service:

PAGE	CORRECTION
6	Table 2 - Streams and Associated Species within and Adjacent to the Study Area*, corrected to read:

Stream Name	ADF&G No.	Species
	Streams Adjacent to Study Area	
Whiting River	111-35-03	King, sockeye, coh pink, chum, Dolly Varden, cutthroat
Unnamed	111-35-15	Unknown
	111-35-17	"
	111-35-18	"
	Streams Within Study Area	
Sweetheart Creek	111-35-20	Pink, chum, coho, Dolly Varden
Unnamed	111-35-30	"
Gilbert Creek	111-35-32	Pink, chum, coho, sockeye, cutthroat Dolly Varden
Unnamed	111-35-34	Pink, chum, coho, Dolly varden, cutthroat
"	111-35-36	" "
"	111-35-37	Pink, chum, coho, Dolly Varden
"	111-35-3	"

*See Appendix D for map and additional data

PAGE	CORRECTION
37	Column 2, paragraph 7, line 9, corrected to read ". . . of 40 years or longer, as per current policy."
52	Column 2, definition of "Native Camp" corrected to read: "Area where temporary shelters were erected by Alaska Natives for short periods of time, but may be used again and again from one year to the next."
52	Column 2, definition of "Native Village" corrected to read: "An Alaskan Native settlement consisting of several structures occupied either on a permanent or seasonal basis."
52	Column 2, correct spelling under Non-Point Source Pollution: "ooperations" should read "operations."
56	Column 1, definition of "Whip Removal" corrected to read: "Th removal of all trees within a harvest unit, left standing afte logging, to prevent the spread of dwarf mistletoe."
56	Column 2, definition of "Windthrows" corrected to read: "Tree uprooted by wind velocity."
67	Column 1, under "H. Isolation from Bear Habitat", change "complete protection" to read "some protection".

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Chatham Area, Tongass National Forest
Post Office Box 1980
Sitka, Alaska 99835

1950
2450
July 1, 1980

Dear Reviewer:

Enclosed is a copy of the Final Environmental Impact Statement for the Gilbert Bay/Holkham Bay Proposed Recreational Development and Independent Timber Sale.

This document was filed with the Environmental Protection Agency on July 1, 1980. The responsible official is Regional Forester, John A. Sandor, USDA Forest Service, Juneau, Alaska. Implementation of the proposal will not take place until 45 days from the date the Final Environmental Impact Statement was transmitted to the Environmental Protection Agency. The Record of Decision is included in the enclosed statement.

I would like to take this opportunity to thank you for your involvement and interest in this planning process.

Sincerely,

William P. Gee
WILLIAM P. GEE
Forest Supervisor

Enclosure

6200-11 (1/69)

FINAL ENVIRONMENTAL IMPACT STATEMENT
Proposed Recreational Development and
Independent Timber Sale for the
Gilbert Bay/Holkam Bay Area of the Tongass National Forest
Southeast Alaska, USDA, Forest Service

Based on the analysis and evaluation in the final environmental impact statement for the Proposed Recreational Development and Independent Timber Sale in the Gilbert Bay/Holkam Bay Area, it is my decision to adopt the Recommended Action Alternative as identified in the final environmental impact statement. This alternative includes: (1) 30 MMBF timber harvest Alternative A with a log transfer facililty in Williams Cove; (2) a logging camp (option 1) located in the LUD III area adjacent to Williams Cove; (3) issuance of a prospectus in 1981 for private capital lodge/resort development at Williams Cove or No Name Cove; and (4) a public recreation cabin (Alternative C) to be constructed by 1983 at Gilbert Bay.

The other alternatives considered included: (1) deferral of management activity, with the lands remaining in their present state; (2) 30 MMBF timber harvest Alternative B with a log transfer facility at Gilbert Bay; and (3) Alternatives C, D, E, F, and G concerning recreational development ranging from primitive to highly developed facilities.

This decision is consistent with the Tongass Land Management Plan, is most responsive to public input, most cost and energy efficient, and is responsive to the social and economic needs of the affected area. The environmentally preferred alternatives are timber harvest Alternative A and recreation development Alternative C.

The decision to adopt the Recommended Action was made recognizing administrative action and a pending legislative proposal affecting the land status of the Williams Cove/Holkam Bay Area. Public concern for protection of the high value marine environment in Gilbert Bay provided the basis for the decision.

There are a number of actions that could preclude implementation of Alternative A. These are:

1. Withdrawal of lands currently segregated in accordance with 204(b) of FLPMA and proposed as the location of the transfer site.

2. Legislation designating Williams Cove area as Wilderness is enacted as presently proposed in one pending legislative proposal.

3. Legislation designating Williams Cove area as Wilderness is not acted upon and Congressional concurrence for the location of the transfer facility in Williams Cove cannot be obtained.

Should any of the above occur, Alternative B will be implemented. The logging camp will be located in accordance with Option I.

The Recommended Action provides mitigation to avoid environmental damage. The monitoring program described in the final environment impact statement is adopted. All practices and standards applicable to resource management will be met or exceeded.

Implementation of the decision will not take place for at least 45 days from the date the final environmental impact statement is transmitted to the Environmental Protection Agency and the Record of Decision is made available to interested individuals, organizations, and agencies. The decision to adopt the Recommended Action as described in the Final EIS is subject to administrative review (appeal) pursuant to 36 CFR 211.19.

JUL 1 1980
Date

Michael A Barton
for JOHN A. SANDOR
Regional Forester

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Summary

INTRODUCTION

This is a Final Environmental Impact Statement (FEIS) prepared by the U.S. Department of Agriculture, Forest Service. It describes an administrative action.

The Tongass National Forest Land Management Plan (TLMP) provides the direction for this proposal.

The proposed action provides for a 30 million board foot (MMbf) timber sale in 1980, and visitor recreation facility development within the Gilbert Bay/Holkham Bay area on the mainland of southeast Alaska.

A Forest Service Interdisciplinary Team (IDT) was assembled to guide the project (Appendix A). In addition, representatives from the Alaska Department of Fish and Game (ADF&G), National Marine and Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (USF&WS) provided information regarding major issues and the various affected resources, i.e., fish, wildlife, wilderness/recreation, minerals, landtype/timber, socioeconomic, and others.

An Environmental Assessment (EA) was prepared and completed in October, 1979. On the basis of this assessment, the decision was made to prepare an EIS.

The assessment identified the need for a more indepth analysis of several aspects of the proposal, mainly:

1) The overall management plan for the timber sale area had to be identified. The plan should analyze the short and long-term sale including proposed transportation and logging systems, total timber volume expected to be removed, and effects on other resource values.

2) Potential development sites for visitor recreation facilities in the Holkham Bay area had to be identified (Appendix B). An analysis to determine the level of visitor facilities development required to accommodate existing and future recreational use of this area was needed.

3) An analysis must evaluate the impacts of the proposed timber sale on adjacent management areas. Specifically, the effects of locating a log transfer facility (LTF), camp, and access road in Williams Cove must be analyzed with respect to potential recreational use and development in the Holkham Bay/Tracy Arm area.

4) Costs and benefits to all resources must be fully analyzed. These are related to the opportunities for enhancement of fish, wildlife, and recreation resources from the proposed transportation system.

The Assessment recommended locating a LTF, access road, and camp in Williams Cove. This was recommended by the IDT because the majority of studies and public input determined Gilbert Bay to be a highly productive marine environment compared to Williams Cove, which is low. Williams Cove is, however, designated in TLMP as a Land Use Designation (LUD) II area. This designation is a roadless backcountry type of management which retains the primitive wildland environment. Road development in a LUD II area is prohibited, except for authorized purposes such as mining development and vital transportation linkages.

Another concern related to Williams Cove is the Federal Land Policy and Management Act (FLPMA) which excludes this area from mineral entry. Forest Service policy requires these withdrawals be managed as roadless and primitive areas. The withdrawal went into effect on December 5, 1978, and is for a two-year period ending December 5, 1980. It was made to allow Congress time to consider this area for possible classification as wilderness. However, the Tsongas amendment No. 626 to the proposed Senate Bill HR-39, excludes Williams Cove and Holkham Bay from wilderness designation. The current legislative status of the 96th Congress has the Williams Cove area excluded from the proposed Tracy Arm-Fords Terror Wilderness in HR-39 passed by the full House in May, 1979. In the Senate, HR-39 passed by the Senate Energy and Natural Resources Committee in November, 1979, has Williams Cove included in the proposed wilderness but allows a 160-acre exclusion for the purposes of providing for access, public safety, or public accomodations or sources relative to recreational use of the wilderness. The Tsongas Amendment No. 626 to the Senate HR-39 does not include Williams Cove or No Name Cove in the wilderness proposal.

ALTERNATIVES CONSIDERED IN REACHING THE RECOMMENDED ACTION

TIMBER HARVEST ALTERNATIVES

Alternative A

This alternative provides for a 30 MMbf timber harvest and 19 miles of road development in the Gilbert Bay Valley with a LTF in Williams Cove. A logging camp would be located either inside the Williams Cove LUD II area or within the adjacent LUD III area in Gilbert Valley. The transportation system would provide access for dispersed recreation opportunities and potential mining development.

Alternative B

This alternative provides for a 30 MMbf timber harvest and 21 miles of road development in the Gilbert Bay Valley with a LTF and logging camp at Gilbert Bay. It would also provide access for dispersed recreation opportunities and potential mining development. No development would occur in the Williams Cove LUD II area.

No Action

Consideration of a No Action alternative is required in any environmental impact statement under the National Environmental Policy Act of 1969. A No Action decision would maintain the study area in its present roadless and undeveloped state.

RECREATION DEVELOPMENT ALTERNATIVES

Alternative C

This alternative provides for primitive and semiprimitive recreation facilities development. To enhance public access to the proposed Tracy Arm-Fords Terror Wilderness, primitive campsites and a recreation cabin are proposed in the Holkham Bay/Tracy Arm area. To increase access for dispersed recreation opportunities, a recreation cabin is proposed at Gilbert Bay.

Alternative D

This alternative emphasizes a moderate lodge/resort development in addition to primitive and semiprimitive recreation facilities.

A moderate lodge/resort is proposed at No Name Cove to enhance public access to the proposed Tracy Arm-Fords Terror Wilderness and encourage tourism. Primitive campsites are proposed in the Holkham Bay area and a recreation cabin is proposed at Gilbert Bay to enhance dispersed recreation opportunities.

Alternative E

This alternative emphasizes a moderate lodge/resort development in addition to semiprimitive recreation facilities. A moderate lodge/resort is proposed at Williams Cove to take advantage of potential facilities development associated with timber harvest operations. This facility would enhance public access to the adjacent wilderness and encourage tourism. Recreation cabins proposed at Holkham Bay and Gilbert Bay would provide minimum shelter and encourage dispersed recreation activities.

Alternative F

This alternative emphasizes a major lodge/resort development in addition to primitive and semiprimitive recreation facilities. A major lodge/resort with construction of an airfield is proposed at No Name Cove offering maximum public accommodations, services, conveniences, and safety. This facility would enhance public access to the proposed Tracy Arm-Fords Terror Wilderness and encourage a high level of tourism. Primitive campsites are proposed in the Holkham Bay area and a recreation cabin is proposed at Gilbert Bay to enhance dispersed recreation opportunities.

Alternative G

This alternative emphasizes a major lodge/resort development in addition to semiprimitive recreation facilities. A major lodge/resort with construction of an airfield is proposed at Williams Cove to take advantage of potential facilities development associated with timber harvest operations. This facility would offer maximum public accommodations, services, conveniences, and safety. A high level of tourism would be encouraged and public access to the adjacent wilderness area would be enhanced. Recreation cabins proposed at Holkham Bay and Gilbert Bay would provide minimum shelter and encourage dispersed recreation activities.

No Action

Under a No Action alternative, present recreational modes and trends would continue. A No Action decision for recreation development fails to meet public expectations for accommodations and services in the study area.

RECOMMENDED ACTION

The IDT has selected timber harvest Alternative A with the logging camp in Gilbert Valley LUD III, issuance of a prospectus for private capital lodge/resort development in No Name Cove or Williams Cove, and construction of a recreation cabin at Gilbert Bay as the Recommended Action. The Recommended Action would provide a 30 MMbf timber sale in 1980 and a recreation cabin and potential lodge/resort development to enhance recreational use of Gilbert Bay and the proposed Tracy Arm-Fords Terror Wilderness.

SUMMARY OF ENVIRONMENTAL EFFECTS

The following assessment provides for evaluation of the environmental impacts associated with implementation of the Recommended Action.

SOIL

No significant impacts to the soil resource are anticipated. Localized short-term impacts associated with soil surface disturbance and attendant increased soil erosion would occur.

WATER

No major long-term impacts to water quality or quantity are anticipated. Short-term impacts to water quality associated with soil surface disturbance and attendant increased soil erosion may occur.

AIR

No major effects on air quality are anticipated. Short-term impacts associated with equipment operations during developmental activities may occur.

VEGETATION

By implementation of this proposal 1,000 acres of old-growth sawtimber would be converted to even age second-growth stands during the first entry. Approximately 2,600 total acres are planned to be harvested during the rotation period.

WILDLIFE

The implementation of this proposal would provide a major wildlife habitat retention zone in Sweetheart Flats. Design, layout, and dispersal of harvest units would provide adequate access corridors for wildlife. Old-growth dependent species, such as deer and martin, would be most impacted.

FISH

The implementation of this proposal would have a negligible potential for impacting commercially important marine communities. Major salmonid spawning and rearing streams and the head of the Gilbert Bay estuary would be contained within the fish and wildlife habitat retention zone and would not be significantly impacted.

VISUAL

Present visual quality in the Gilbert Bay area would be changed due to management alteration of the landscape. The existing visual quality of the Tracy Arm area would be changed in the immediate vicinity of the lodge/resort development. In addition, visual quality at the head of Williams Cove would be changed due to construction of a log transfer facility. Visual quality would change from a Retention to Modification Visual Quality objective in these areas.

CULTURAL

No impacts to cultural resources are anticipated.

CIVIL RIGHTS

No significant impacts to minority groups would occur.

RECREATION

Development of lodge/resort facilities would enhance tourism and public access to the proposed Tracy Arm-Fords Terror Wilderness. Dispersed recreation opportunities would be increased by the public recreation cabin proposed at Gilbert Bay and logging road access to inland activities.

WILDERNESS

Wilderness values adjacent to the proposed lodge/resort development and the boat travel route on Tracy Arm would be reduced. Auditory and visual impacts would reduce the opportunity for solitude.

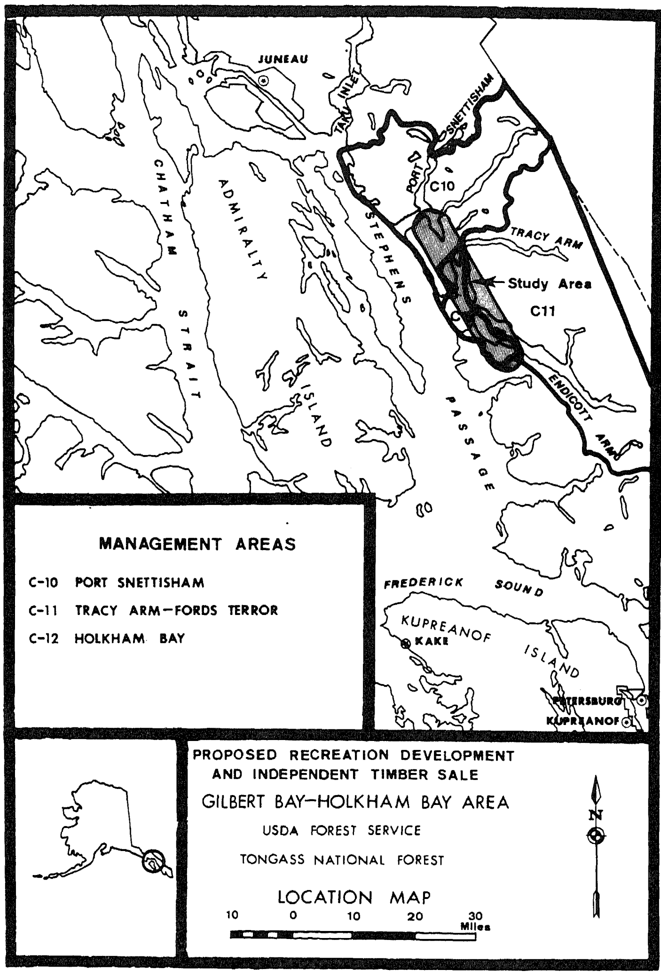
SOCIOECONOMIC

Direct sale related employment benefits that would accrue to the local communities from implementation of the Recommended Action are estimated at 13 jobs throughout the year. Process related employment would be expected to maintain 19 positions.

Lodge/resort development would provide numerous socioeconomic benefits to the public. These would include employment opportunities, increased dispersed recreation opportunities, public safety and conveniences in a remote area, and enhanced tourism for southeast Alaska.

CONCLUSION

Implementation of the Recommended Action would meet TLMP direction and commitment. Timber harvest and recreation facility development would be provided with sensitivity to a wide range of environmental needs. Employment opportunities would be provided and local and national goals for wildland management would be met.



I. Introduction

PURPOSE OF ACTION

The purpose of this action is to provide a 30 MMbf timber sale and the opportunity to develop recreation facilities within the Gilbert Bay/Holkham Bay Area.

NEED FOR ACTION

TLMP direction provides an average annual harvest of 450 MMbf for the decade from the Tongass National Forest. However, 520 MMbf are called for in 1980. Of this volume, 220 MMbf is to be provided for independent operators. Chatham Area's target level for independent operators is 30 MMbf. Gilbert Bay was classified as Land Use Designation (LUD) III in the TLMP process. This designation provides for a combination of commodity and amenity development (Appendix C).

Regional direction, as well as Congressional intent, indicates potential visitor recreation facility needs for the proposed Tracy Arm-Fords Terror Wilderness. The Holkham Bay and Tracy Arm area has been identified in TLMP for potential marina, recreation facility, and visitor information service construction during the second five-year period of the plan (Appendix C).

LOCATION OF PROJECT

Several areas will be affected by the proposed timber sale and recreation facilities development. These are Gilbert Bay, Gilbert Valley, Tracy Arm, and Holkham Bay.

Affected areas are situated on the mainland portion of southeast Alaska, approximately 35 miles south of Juneau, within areas designated by TLMP as Management Area C-10 and C-12.

MAJOR ISSUES, CONCERNS, AND ESSENTIAL BACKGROUND INFORMATION

The following information has been collected from various sources and condensed for brevity.

Sources include public involvement meetings held in Juneau and responses to the Environmental Assessment (EA) for the proposed timber sale completed October 1979. Some of the major issues and concerns were identified by the Interdisciplinary Team (IDT) and Regional Forester during the planning and review phases of the EA. These are as follows:

WILLIAMS COVE

The IDT identified a preferred alternative in the EA process which included a log transfer facility (LTF) in Williams Cove. It was preferred for two main reasons: (1) Based on analysis of the transportation system, it was most cost efficient, and (2) it would satisfy public sentiment against a LTF in Gilbert Bay which could impact the biological values there

However, Williams Cove is a Land Use Designation (LUD) II area, which, because of USDA Forest Service land use constraints, will require special authorization for any proposed access roads. In addition, Williams Cove is withdrawn from mineral entry until December 5, 1980 by provision of the Federal Land Policy and Management Act (FLPMA) of 1976. This withdrawal was made to allow Congress time to consider this area for possible classification as wilderness.

FISHERIES

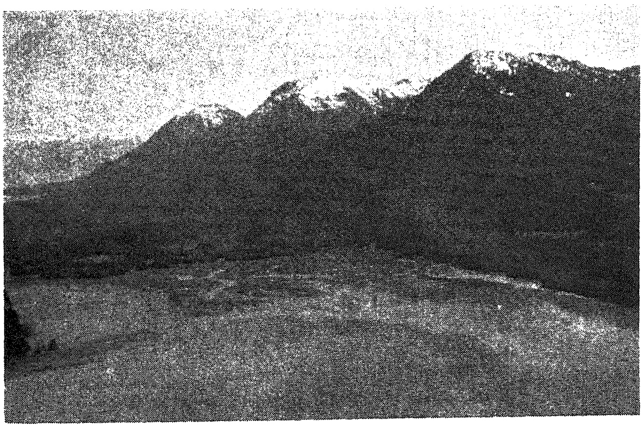
The Gilbert Bay area and associated drainages have been identified by several agencies (USDI-Fish and Wildlife Service, USDC-National Marine Fisheries Service, Alaska Department of Fish and Game, and USDA Forest Service) and public interest groups as being an important salmon and crab rearing, spawning, and harvest area. Concern has been expressed over any development activities which could potentially impact the intertidal and estuarine zones and major streams in Gilbert Bay.

PROTECTION OF SWEETHEART FLATS

The estuary and grassflats at the head of Gilbert Bay, known as Sweetheart Flats, are recognized as important wildlife and fish habitat. This area has been identified by the public and in the proposed Juneau Coastal Zone Management plan as "an area which merits special attention" due to its recreational, wildlife, and fisheries values.

RECREATION

Interest has been expressed in evaluating potential development sites for recreation visitor facilities in the Holkham Bay area (Appendix B). An analysis is required to determine the level of visitor facility development needed to accommodate existing and future recreational use of the area.



View of Gilbert Bay looking south toward Williams Cove. Sweetheart Flats area is in foreground.

An evaluation of potential impacts of the proposed timber sale on adjacent management areas is needed. Specifically, the effects of locating a LTF, camp, and road in Williams Cove must be analyzed with respect to potential recreational use and development in the Holkham Bay/Tracy Arm area.

PERMITS REQUIRED FOR IMPLEMENTATION OF THE PROJECT

The following permits would be required for implementation of the Recommended Action:

Activity	Type of Permit	Source
Logging Camp	Sewage Discharge Permit	Either State of Alaska or U.S. Environmental Protection Agency.
Log Transfer Facility	State Tidelands Permit or Lease	State of Alaska Dept. of Natural Resources, Division of Forest, Land, and Water Management.
Any construction or development affecting U.S. waters	U.S. Army Corps of Engineers	U.S. Army Corps of Engineers
Recreation Facilities	dependent on development	Same as listed above

In addition, the State Department of Health and Social Services, Environmental Health Section, requires permits for the operation of tourist accommodations and food service operations which would be associated with lodge/resort development.

II. Affected Environment

PHYSICAL FACTORS

GEOMORPHOLOGY

The study area is typical of recently glaciated mainlands of southeast Alaska. It is mountainous with deep fiords and inshore islands characteristic of a submerged coastline. The most recent glaciation likely occurred 5-10,000 years ago. Present-day glaciers occur at the heads of Tracy and Endicott Arms and icebergs are common in these areas. Two large, glacially-fed rivers (Speel and Whiting) reach tidewater near Port Snettisham.

View of South Sawyer Glacier in Tracy Arm.

Gilbert Valley is a typical example of a glacially scoured U-shaped valley. Uplands are glacially abraided and shallow soils are present. Ablation till of local origins is deposited on lower valley sideslopes. Glacial outwash and morainal deposits are present in the valley bottoms.

GEOLOGY

The study areas geologic composition is related to the Wrangell-Revillagigedo belt of metamorphic rocks. The adjacent Snettisham Peninsula area is composed mainly of schistose, phyllitic greenstone, and phyllite. Schist and phyllite components commonly exhibit well-developed parallelism. Granitic and quartz intrusions are common throughout the area. A major mineralized zone runs through the study area.

CLIMATE

Climatic data for the study area is limited and no seasonal averages are available. However, given its geographic location and the known climatic patterns of southeast Alaska, general characteristics and trends can be addressed. The area is located within a maritime climatic zone which is characterized by cool, moist, and cloudy conditions. Weather stations some distance to the north and south (Juneau and Five Finger Light) report average annual precipitation rates of 50-60 inches, with average annual temperatures of 40-50 degrees F. Storms and heavy precipitation are most prevalent from September to November. Mainland valleys, such as Gilbert Valley, often receive greater precipitation and lower temperatures than is characteristic of these coastal reporting stations. Snowfall is great, with annual accumulations likely exceeding five feet at low elevations.

SOIL

Shallow mineral soils (less than four feet) on steep, V-notch dissected sideslopes are common in glacially-formed, U-shaped valleys of southeast Alaska, such as Gilbert Valley. Local sideslope soils are formed from colluvium, residuum, and glacial till. Inclusions of fine-textured (clay) soils of glacial origin occur infrequently along lower sideslopes. Small areas of organic soils (muskegs) are found on sideslope benches where subsurface drainage is impaired. These soils may be as deep as ten feet. Sideslope soils, other than the clay soils, pose few hazards to developmental activities. These soils have low susceptibility to mass erosion on slopes less than 65 percent and are resistant to surface erosion and surface disturbance due to a thick (greater than six inches) organic layer.

A complex maze of active and abandoned stream channels dissects much of the Gilbert Valley bottom lands. A surface water table is present over much of the lower valley, due to extensive beaver damming of water courses. Valley bottom soils are comprised of coarse glacial outwash and morainal gravels with inclusions of alluvial deposits and organic soils.

The glacial gravel soils are youthful, have relatively shallow (less than six inches) surface organic layers, and occur on nearly level (less than 10 percent) terrain. These soils provide a firm base and possible material source for rock overlay road construction.

soil inventory report for the Gilbert Valley, ontaining soil suitability and capability maps nd soil descriptions, is available in the USDA orest Service offices in Sitka and Juneau. he report includes brief hydrologic character-zations of the area's major streams.

IRE

he incidence of forest fire in the study area s extremely low due to high annual recipitation. Fire occurrence is primarily uman caused. Summer rainfall and the relative nfrequency of summer electrical storms are ajor factors in reducing wildfire potential.

IR

ir quality within the study area is good. The rea contains no sources of air pollution at resent, and potential pollutants would be apidly dispersed by winds and removed by recipitation.

ATER

ilbert Creek and its tributary streams occupy narrow, nearly level valley bottom located etween Gilbert Bay and Williams Cove. Stream hannels are dispersed, with many occupying emnant glacial outwash channels.

ater quality is good throughout the study area nd is similar to other non-glacial streams in outheast Alaska. No quantitative water uality data is available and the range of atural sediment levels is unknown.

teep sideslope V-notch drainages channel most f the surface water flow to the bottomlands. hese ravines often have bedrock-controlled hannels averaging 25 feet in width, and are .5 to 5 feet deep at bankfull depth. They haracteristically have a steep gradient, with umerous cascades and small waterfalls. Flow elocity may approach ten feet per second. hallow mass wasting of soil and weathered rock ragments on ravine sideslopes is a common atural erosion process that delivers sediment o these channels. This sediment is often eposited at the toe of valley sideslopes as nall alluvial fans.

treamflow estimates of several streams within he study area have been calculated (Table 1). hese estimates provide an indication of eriodic flows and flow variability for streams ithin the study area.

Table 1. Streamflow Estimates for Several Streams of Varying Watershed Size within the Study Area.

	Flow					
Watershed Area	Mean	2 yr.	10 yr.	25 yr.	10 yr.	1
sq. miles	cubic feet/second/sq. mile					
1.3	6.4	140	232	264	0.31	
1.4	6.4	146	229	267	0.29	
2.5	5.6	141	220	253	0.20	
4.3	5.9	132	206	238	0.23	

Comparison of estimated streamflow data for the study area with actual streamflow measurements from other parts of southeast Alaska indicates that streamflow characteristics are similar.

Stream reach stability ratings are available for all major streams within the study area. Ratings range from poor to excellent. However, six of the eleven stream reaches were rated poor or fair. This indicates inherent streambank instability and these streams may be susceptible to impacts when crossed by roads.

BIOLOGICAL FACTORS

VEGETATION

Forest stands in the study area are composed primarily of western hemlock and Sitka spruce, with smaller amounts of Alaska-cedar. Stunted lodgepole pine is often found on the fringes of muskegs. Dwarf mountain hemlock is commonly associated with muskegs and alpine areas. Alder lines some streams and shorelines and dominates snowslide, landslide tracks, and highly disturbed areas.

TLMP rates the timber value of this area a 3 (average), on a scale of 1-5. Stand examinations and cruise studies conducted in 1979 reveal the timber to be over-mature old-growth (200-400 years old), of sawtimber size (average 22" Diameter at Breast Height), and well past the culmination of mean annual increment. Average volume per acre is approximately 30 Mbf/acre. The total land base within the proposed sale area is approximately 18,000 acres. Approximately 6,155 acres of this is identified as commercial forest land. Percent distribution of the major commercial species is as follows: Sitka spruce 29 percent; western hemlock, 61 percent; and Alaska cedar, 10 percent. Mistletoe hazard analysis on over 300 stands in the Gilbert Valley indicates only seven stands showing measurable quantities of mistletoe infection. Overall, the area has a low mistletoe hazard classification.

Forest understory is moderately dense in the old-growth stands where trees of various ages, sizes, and conditions provide space and light for smaller plant communities. Understory vegetation of blueberry, huckleberry, rusty menziesia, and devilsclub predominate. Sphagnum mosses, sedges, rushes, and ericacious shrubs are commonly found in muskegs. Grass-sedge meadows are located at mouths of major streams. Low, mat-forming vegetation adapted to snow pack and wind abrasion dominates alpine areas; heaths, grasses, and, low plants such as deer cabbage are typical.

No plant species presently classified as threatened or endangered are known to exist in the study area.

WILDLIFE

The Tongass Land Management Plan (TLMP) addresses wildlife in its task force reports. TLMP rates Gilbert Bay area wildlife values as very high (5) on a scale of 1-5. Additional information is available in "Alaska Wildlife and Habitat", Alaska Department of Fish and Game (Blue Books). A list of wildlife species found in the study area is provided below:

Sitka black-tailed deer
Brown bear and black bear
Wolf, wolverine, coyote
Beaver, mink, marten
River otter, weasel
Mountain goats
Small mammals
Marine animals

Grouse, ptarmigan
Vancouver Canada goose
Waterfowl
Seabirds, shorebirds
Other passerine birds
Bald eagles
Other raptors

Waterfowl, black bear, marten, and beaver are the most predominant species that inhabit the area. Deer populations are relatively low, due to severe winter conditions and deer concentrations are confined to the southern and eastern portions of the Snettisham Peninsula. Mountain goats inhabit the mountains to the east. No major goat wintering areas occur near Gilbert Bay. A major winter range does exist on the southwest facing slopes between Tracy and Endicott Arms.

Holkham Bay has been identified by the Alaska Department of Fish and Game (ADF&G) as key waterfowl and pelagic bird habitat. Gilbert Bay and Valley are major staging and molting areas for waterfowl and nesting is known to occur. Large numbers of Canada geese are present in Sweetheart Flats during spring. Pair bonding has been observed and nesting is a strong probability, although no goose nests or broods have been located. Nesting swans have been reported in upper Gilbert Creek. A wide assortment of ducks, mergansers, and shorebirds are present throughout the estuaries and wetlands.

Black bear and brown bear can be found throughout the area, with heaviest use associated with Sweetheart Flats. Wolves are present within the study area; however, population size and major use areas are not known.

Beaver are the most apparent furbearers in the valley, with dams, lodges, and feeding areas evident throughout the flats. River otter are present and use is concentrated along beaches and streams. Marten inhabit the area, as do mink and weasel, but no population estimates are available.

Sweetheart Flats, at the head of Gilbert Bay, has been identified by Juneau's Coastal Zone Management Plan, ADF&G, U.S. Fish and Wildlife, and Forest Service biologists as a sensitive and highly productive fish and wildlife habitat. Waterfowl, brown and black bear, marine mammals, and fisheries values are the major reasons for this designation.

There are no resident wildlife species in the area that fall within the purview of the Endangered Species Conservation Act of 1969 (1973) or the Alaska Department of Fish and Game official endangered list.

Bald eagles are found in the study area, and ten nesting trees have been identified. The Bald Eagle Protection Act of 1959 (amended) and the Migratory Bird Treaty Act of 1918 (1974) protect all subspecies and races of bald eagles.

Whales which occur in the off-shore waters may include such endangered species as the humpback, finback, sei, blue, sperm, and gray whales.

The non-threatened killer and minke whales may also be observed throughout the area as well as other marine mammals such as Steller sea lions and harbor seals. Sea lion rookery and haulout areas are located adjacent to the study area along Stephens Passage and in Port Snettisham. Large numbers of dall porpoise have been observed in the Tracy Arm area. Harbor seal concentrations are found in Gilbert Bay and the Whiting River. Seal pupping occurs on the ice at the heads of both Tracy and Endicott Arms during spring.

FISH

The study area contains eleven ADF&G classified streams and a major glacial river. Commercial fisheries for both crab and salmon are extensive in the bay and surrounding waters. TLMP Fisheries Task Force rated the area 4 (high) on a scale of 1-5 for commercial fisheries and 3 (moderate) for sport fishery values. King, sockeye, coho, pink, and chum salmon; Dolly Varden char; cutthroat trout; halibut, herring, smelt; Dungeness, tanner, and king crab; shrimp, clams, and scallops inhabit Gilbert Bay at some time during their life cycle.

The river and streams flowing into Gilbert Bay provide important habitat for salmon as well as resident and anadromous Dolly Varden char, and cutthroat trout (Table 2).

Table 2 - Streams and Associated Species Within and Adjacent to the Study Area.*

Stream Name	ADF&G No.	Species
		Streams Adjacent to Study Area
Whiting River	111-35-03	King, sockeye, coho, pink, chum, Dolly Varden, cutthroat
Unnamed	111-35-15	Unknown
	111-35-17	"
	111-35-18	"
		Streams Within Study Area
Sweetheart Creek	111-35-20	Pink, chum, coho, Dolly Varden
Unnamed	111-35-30	"
Gilbert Creek	111-35-32	Pink, chum, coho, sockeye, cutthroat, Dolly Varden
Unnamed	111-35-34	Pink, chum, coho, Dolly Varden, cutthroat
Unnamed	111-35-36	"
Unnamed	111-35-37	Pink, chum, coho, Dolly Varden
Unnamed	111-35-3	"

*See Appendix D for map and additional data.

The head of Gilbert Bay is the most productive and important estuary in Port Snettisham. TLMP assigned it a rating of 4 (high) on a scale of 1-5, for its value and sensitivity to development. Intertidal and estuarine areas are generally important as short-term but essential rearing habitat for young salmonids. Juvenile and adult forms of many marine species, including shellfish, spend much of their life cycle in this estuarine zone. Juvenile salmon released from the Port Snettisham hatchery, presently under construction, are expected to utilize the Gilbert Bay estuary. Gilbert Bay is known to be a staging area for returning king, coho, sockeye, pink, and chum salmon, making it important to the sport and commercial fishery.

The estuary at the head of Williams Cove has been identified by the National Marine Fisheries Service and Fish and Wildlife Service as having a low biological productivity as compared to Gilbert Bay. Major sport and commercial fish and shellfish species are absent or exist in low numbers. The Williams Cove TLMP estuarine rating is 2 (low) on a scale of 1-5. The sandy and rocky substrate drops off rapidly from the intertidal zone into deep water.

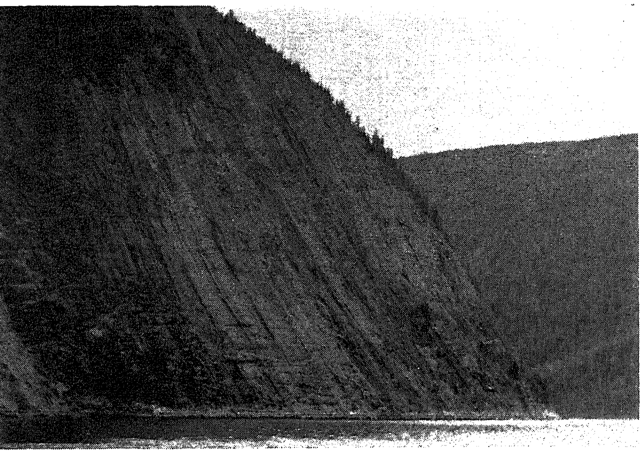
No known threatened or endangered fish species are known to exist in the study area.

SOCIOECONOMIC FACTORS

VISUAL

The study area is located within the Coast-Range Visual Character Type. For further information, refer to "Visual Character Types", Series No. 63, published by the USDA Forest Service in Alaska.

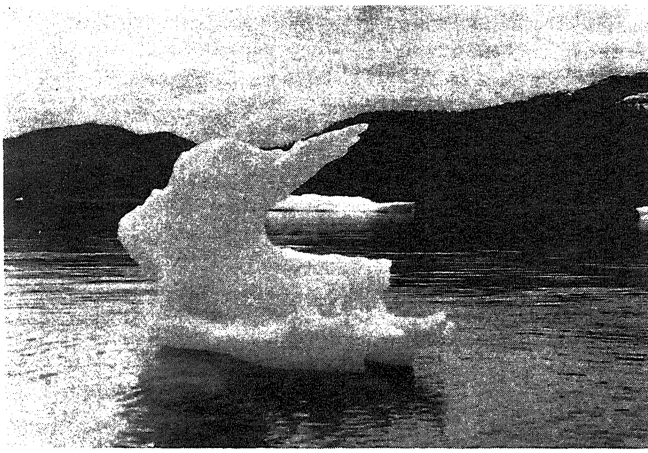
Saltwater fiords within proposed Tracy Arm-Fords Terror Wilderness have achieved national prominence and are valued for their unique scenic quality. The glacially-scoured, nearly vertical rock walls, and attendant waterfalls of Tracy Arm and Fords Terror plunge to saltwater. Views of glaciers, snow-capped mountain tops, jagged peaks, and spires are present. Sumdum Glacier, located in the proposed Tracy Arm-Fords Terror Wilderness, can be viewed from Holkham Bay. Although the glacier has receded to approximately one mile from shore, its presence dominates the landscape in the area.



The glacially-scoured, nearly vertical rock walls typical of Tracy Arm.

The landscape of the Gilbert Bay/Holkham Bay area is characterized by a diversity in scenic elements. This results from a variety in waterforms, glacial formations, and vegetation patterns. These include the large tidal meadows such as those found in Gilbert Bay, conifer-covered mountain slopes interspersed with muskegs, and various alpine ecosystems in the higher elevations. A scenic waterfall is found on Sweetheart Creek adjacent to Gilbert Bay.

Visual sensitivity levels within the study area range from high to low, using the Forest Service Visual Management System. The landscape viewed from the boat travel route in Tracy Arm and Holkham Bay has a high visual sensitivity attributable to national recognition of the scenic quality in the proposed Wilderness. The landscape viewed from the small boat route in Gilbert Bay has a medium visual sensitivity. Viewer sensitivity to the visual resource is secondary to sport fishing and commercial fishing activities in this area. Areas not seen from the travel routes described above have a low visual sensitivity level. For additional information, refer to USDA Agriculture Handbook No. 462, Vol. 2, Chapter 1 - -The Visual Management System.



Scenic iceberg configurations as found in Williams Cove.

Base of the waterfall found on Sweetheart Creek, adjacent to Gilbert Bay.

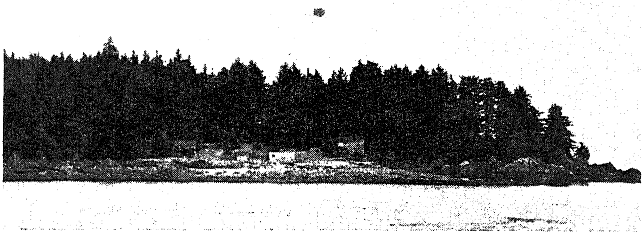
CULTURAL

Based on the 1979 and 1980 surveys of Gilbert Bay, prehistoric use is not evident. This does not negate the possibility of prehistoric use, since existing subsistence resources are assumed to have been similar throughout the past. Therefore, exploitation of the area in prehistoric and early historic times is highly probable.

Historical use by two major tribal groups has occurred in the study area. The Taku people utilized the Port Snettisham area south to Sumdum Island, and the Kake groups used the southern portions of Endicott Arm. Literature review gives credence to the presence of village and seasonal hunting encampments scattered throughout this area.

Euro-American usage of historical importance includes mining, fox farming, and homesteading. Cultural sites within the study area which would require further archaeological examination if directly impacted by development are listed below:

Harbor Island	Fox Farm
Gilbert Bay	Pitch trees, historic cabin site, historic dock facility with boat remains.
Sweetheart Creek Camp	Native camp site (unconfirmed).



Cultural resource - abandoned fox farm found on Harbor Island.

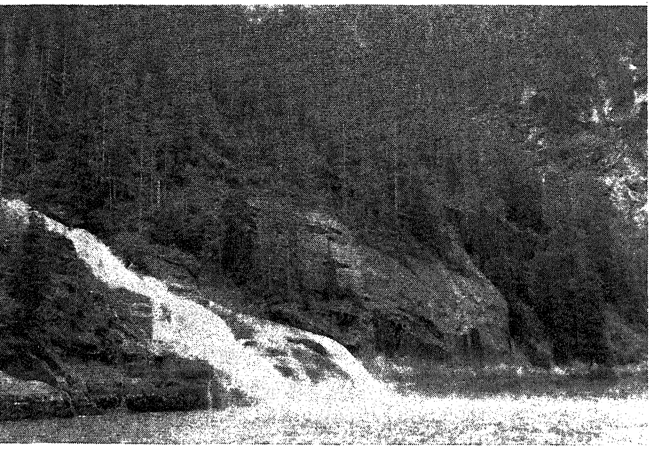
WILDERNESS

Wilderness resource in Gilbert Valley was evaluated in TLMP and the subsequent allocation placed this area in a non-wilderness category. Refer to Appendix C for TLMP management direction regarding Gilbert Valley.

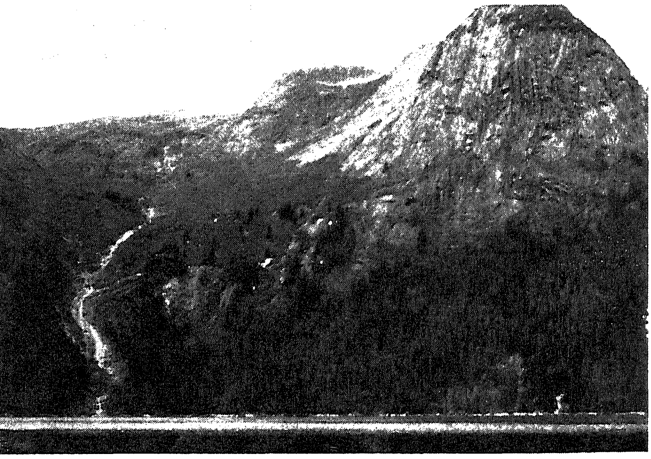
The proposed Tracy Arm-Fords Terror Wilderness includes the southern portion of the study area. Administrative and Congressional actions that affect this wilderness classification and management include:

> TLMP, which is the Tongass National Forest supplement to the Roadless Area Review and Evaluation (RARE II), recommends wilderness management for the Tracy Arm - Fords Terror area (Refer to TLMP land use designation map).
>
> On December 5, 1978, the Secretary of Agriculture withdrew (for two years) the entire drainage of Holkham Bay, allowing additional time for Congressional action with regard to wilderness classification (Refer to TLMP land use designation map).
>
> HR-39 as passed by the U.S. House of Representatives would designate the area proposed in RARE II as wilderness. Harbor Island is excluded.
>
> The Senate version of HR-39 would designate wilderness status for the same area as RARE II and the House HR-39, and include the balance of management area C-12 (mouth of Holkham Bay and Williams Cove, see Appendix F).
>
> Senate Bill HR-39, Amendment No. 626, sponsored by Senator Tsongas would retain the same wilderness boundary as RARE II and HR-39. Williams Cove and Holkham Bay are excluded from wilderness designation.

Visitors to the proposed Wilderness are primarily attracted to the view and experience associated with the powerful setting, created by narrow high-walled fiords, tidewater glaciers, massive icebergs, the turbulent tide chuck of Fords Terror, wildlife, and numerous waterfalls. Solitude, natural condition, and geologic interest are factors that enhance the wilderness quality of this area.



Scenic waterfall typically found on Tracy Arm.



The aesthetic quality of Tracy Arm is enhanced by the integration of scenic waterforms, vegetation patternn, and geologic formations.

Minerals exploration activities near the mouth of Tracy Arm and at the base of Sumdum Glacier periodically impact wilderness visitors through the presence of helicopters.

RECREATION

Gilbert Bay offers a diversity of recreational opportunities (Table 3). These include bear and waterfowl hunting, fishing, hiking, crabbing, boat touring, and prospecting. These activities are participated in by both boat and fly-in visitors. Most sport fishing is done in the freshwater streams and beaver ponds where various species of salmon and trout are found. The waterfall, a short distance up Sweetheart Creek, is a popular feature. The bay offers fair anchorage opportunities but is unprotected from northerly winds. During spring and summer, this area is moderately used as an overnight anchorage by recreational boaters from Juneau. Opportunities exist for hikers to access Sweetheart Ridge, though no trail exists. The ridge provides a view of Tracy Arm, Holkham Bay, Stephens Passage, and Admiralty Island. In addition, goats, bear, and other wildlife may be viewed in the alpine environment.

The Holkham Bay area provides dispersed recreation opportunities. Visitors often explore the abandoned fox farm on Harbor Island and the mining and cannery remains at Sanford Cove. The old prospector's cabin at Power Creek and prospector's trail leading to the base of Sumdum Glacier are additional amenities. Visitors exploring the peninsula between Tracy Arm and Endicott Arm are afforded the opportunity to investigate large grounded icebergs of interesting configuration.

Williams Cove has been identified as a fair weather anchorage. No Name Cove provides one of the best anchorage sites in the Tracy Arm area. It has also been identified as a bear hunting area. Other recreational opportunities in this vicinity are somewhat limited (Table 3).

Table 3 - TLMP Recreation Resource Value Ratings for the Study Area

	Gilbert Bay	No Name Cove/ Williams Cove
Primitive Recreation	4*	3
Semi-Primitive Recreation	4	3
Concentrated Recreation	2	1
Sport Fishing	3	2
Wildlife Values	5	2
Estuarine Sensitivity	4	3
Scenery and Ecotype Diversity	3	1

*The above ratings are based on a comparative scale of 1-5, low to high. Values represent a composite for the entire area and therefore, may not be accurate for specific sites.

WATER USE AND LAND OWNERSHIP

Various parcels of eliminated and/or patented ground are located in the study area. Some of it is founded upon mining interests, while others are homestead lands. Two United States Geological Survey power withdrawals are located in this area, providing possible sites for future hydroelectric development. Mining activity is present in the area, with a large block of valid claims located north and south of Lower Sweetheart Lake (see part 2 of this statement - Land Use Map).

Native Historical Sites are claimed at Powers Creek and Sanford Cove.

The Federal Land Policy and Management Act (FLPMA) closed the Tracy Arm/Endicott Arm/Holkham Bay area to future mineral entry and State and Native corporation land selections for a period of two years commencing December 5, 1978.

More detailed information concerning these lands is available in the USDA Forest Service Offices in Sitka and Juneau.

II. Evaluation Criteria

Evaluation criteria were established during the preparation of the Environmental Assessment (EA) to test the feasibility of alternatives. The criteria used in the EA were revised by the Interdisciplinary Team and expanded to include criteria applicable to recreational development. These criteria were approved by the Regional Forester on January 15, 1980. As a result of the planning process, they were modified to include only those criteria which aid in the decision making process. The evaluation criteria are as follows:

1. Provide for development which would enhance and be compatible with recreational use of Holkham Bay and the proposed Tracy Arm-Fords Terror Wilderness . The source of this criterion is Forest Service Regional program direction.

2. Minimize potential adverse impacts on the quality and productivity of the following resources: soil, water, visual, wildlife, fisheries, timber, recreation, cultural, and wilderness. The source of this criterion is the National Forest Management Act of 1976.

3. Provide development which complies with LUD II and Forest Service management requirements for Federal Land Policy and Management Act (FLPMA) withdrawal areas. The source of this criterion is the Tongass Land Management Plan and National Forest Service program direction.

4. Provide acceptable effects with regard to timber harvest and management on potential recreation development in the Holkham Bay/Tracy Arm area. The source of this criterion is Forest Service Regional program direction.

5. Provide significant socioeconomic benefits from the proposed development. The source of this criterion is Forest Service Regional program direction.

6. Provide a logging camp location which will not adversely impact fish streams, wildlife habitat, water quality, and visual quality, while providing a healthy and safe environment and access for residents. The source of this criterion is Forest Service management direction.

7. Provide development which is compatible with public expectations expressed during the public involvement process. The source of this criterion is the National Environmental Policy Act.

IV. Alternatives Considered

PROCESS TO FORMULATE ALTERNATIVES

A study plan for this project was prepared and approved on January 15, 1980. This study plan directed the Interdisciplinary Team (IDT) and established the management goals and objectives to be attained. The study plan also required the IDT to identify the alternative which best met the evaluation criteria with regard to both short and long-term management objectives for the area.

TIMBER HARVEST ALTERNATIVES DELETED FROM DETAILED STUDY

Areas programed under TLMP for Independent Timber Sales were analyzed and for various reasons, all but the Snettisham area were deferred. These areas are planned for future timber harvest (Appendix E).

During the intitial planning phase and preliminary field studies, several areas in addition to Gilbert Valley were analyzed. Because of present economic factors, accessibility, and potential impacts, these areas were not considered feasible at the present time and were dropped from future study. The areas considered were:

Area Considered	IDT Conclusion
North of Sweetheart Creek to Whiting River	Area is inaccessible from south of Sweetheart Creek. Requires separate log transfer facility, road access and/or A-frame harvest methods. Timber harvest is presently uneconomical and presents additional environmental impacts.
Whiting River	Only a small area at the mouth of Whiting River is accessible to A-frame or aerial harvesting techniques. Same conclusion as Sweetheart area.
Port Snettisham Bay	Power lines make access difficult and harvest potential unsafe. Isolated. Same conclusion as Sweetheart area.
Sentinel Point south side of entrance to Port Snettisham Bay.	No access from Gilbert Bay. Isolated. Patented mining claims and private lands encumber the area. Same conclusion as Sweetheart area.
Stephens Passage	Isolated. Rough water area most of year. High visual sensitivity. Same conclusion as Sweetheart area.

None of the above areas alone were considered capable of providing the 30 MMbf volume required for the sale. Gilbert Valley was consequently considered the most logical area to provide the sale volume while minimizing potential resource impacts.

TIMBER HARVEST ALTERNATIVES

The IDT identified operable timber, critical fish and wildlife habitat, visual management zones, and sensitive soils within the proposed sale area. These features were displayed on color aerial photographs with stereoscopic capability and on two-inch/mile maps for each alternative. With this information, the IDT created preliminary plans of proposed cutting units, road locations, camps, and log transfer facility (LTF) sites. These proposed actions were reviewed by each specialist to assess conformity to the criteria and objectives of the study plan.

Critical fish and wildlife habitat was retained to provide protection for major dependent species (see Timber Harvest Alternative Maps in Part 2 of this statement). These retention zones include Sweetheart Flats, along with approximately 1,500 acres of beach fringe and upper valley wetlands. Fish and wildlife retention totals 2,500 acres. Approximately ten percent (650 acres) of the total CFL in the study are is included in retention. Future harvesting in these zones would be prohibited ess it is determined that harvesting would adversely affect or would benefit wildlife ulations.

rage unit size for first entry is 37 acres. n timber harvest alternatives provide for ure re-entry for resource management and tection.

ernative A

s alternative proposes harvesting 30 MMbf cluding approximately 2 MMbf of utility ume) of timber from the Gilbert Valley with options for a LTF and three possible ging camp locations. Road construction of roximately 19 miles would be required, of ch 1/2 to 1-1/2 miles would be located at head of Williams Cove (LUD II), depending the LTF site selected. The LTF would sist of a simple log skid design into deep er.

major construction activities within the bert Bay tidal zone would occur, and no and storage area would be required. Nearly the log haul would be over a slightly ling to favorable grade in the Williams Cove ection.

d of Williams Cove. Logging camp site ion #2 and log transfer facility ation proposed in Alternative A are in eground.

West side of Gilbert Bay. Logging camp site proposed in Alternative B is in middleground.

Alternative B

This alternative proposes harvesting 30 MMbf (including approximately 2 MMbf of utility volume) of timber from the Gilbert Valley with a LTF and logging camp at Gilbert Bay.

Road construction of approximately 21 miles would be required. Approximately two miles of log haul would be adverse.

No upland storage area would be required. Under this alternative, one additional major bridge approximately 110 feet long would be required.

No developmental activities would occur in Williams Cove (LUD II).

RECREATION ALTERNATIVES DELETED FROM DETAILED STUDY

Following Congressional and Forest Service Regional direction, a range of sites and development options were evaluated in a separate report entitled "Site Suitability Analysis of Potential Recreation Development in the Gilbert Bay/Holkham Bay Area" (Appendix F).

Area Considered	IDT Conclusion
Sandord Cove	Native historic site selection, and adjacent patented land make development at this site questionable.
Sand Spit at Entrance to Tracy Arm	Exposure to winds, wave action and iceberg hazards make development of an anchorage or marina unfeasible.
Sweetheart Flats	Bear habitat at Sweetheart Flats may foster unsafe conditions for primitive campsite development.

RECREATION ALTERNATIVES

Five recreation development alternatives were formulated for detailed study. Each alternative, with applicable facilities, was displayed on black and white aerial photographs with stereoscopic capability and on one-inch/mile base maps. These proposed facilities were reviewed by each specialist to assess their conformity to the criteria and objectives of the study plan.

The alternatives for recreational developments offer a diversity in visitor facilities ranging from primitive to fully developed (Table 4). The primitive facilities would provide a low level of comfort and convenience with a limited capacity. Conversely, the fully developed facilities offer a high level of comfort, convenience, and services. In addition, these facilities have potential for accommodating large numbers of visitors at one time. See maps in Part 2 of this statement for illustrations of each alternative development plan.

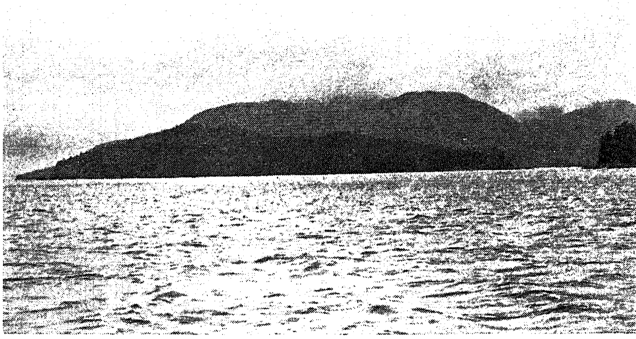
Table 4 - Summary of Recreation Alternatives.

	Proposed Development			
	Primitive Campsite	Recreation Cabin	Moderate Resort	Major Resort
Alternative C =	1	2	0	0
Alternative D =	1	1	1	0
Alternative E =	0	2	1	0
Alternative F =	1	1	0	1
Alternative G =	0	2	0	1

Alternative C

This alternative provides primitive campsites ar recreation cabins. The following facilities are proposed:

Site	Development Proposed
Harbor Island	Primitive campsite with pit toilets, tent sites, and mooring buoy.
No Name Cove	Public recreation cabin and mooring buoy. Four miles of hiking trail in planning period 2 (1986-91).
Gilbert Bay	Public recreation cabin at site option #1, #2, or #3. 3.5 miles hiking trail with development of cabin site option #1 or #2. Mooring buoy. All development during planning period 2 (1986-91).
Williams Cove	0.75 miles of hiking trail in planning period 2 (1986-91).



Harbor Island. Proposed recreation facilities development site.

Primitive campsite facilities will serve those recreationists desiring a more primitive experience. Increasing interest in kayaking and beach camping in southeast Alaska indicates a growing need for this type of facility. Public recreation cabins will enhance opportunities for dispersed recreation while providing shelter. Trails proposed in this alternative will provide access to alpine areas and provide access between Williams Cove and the proposed logging road. All proposed development sites are exposed to wind and mooring buoys will provide additional safety to small boats.

Alternative D

This alternative provides for a modest commercial lodge/resort in addition to primitive campsites and a recreation cabin. The following development is proposed:

Site	Development Proposed
Harbor Island	Primitive camp sites with pit toilets, tent sites, and mooring buoy.
Gilbert Bay	Public recreation cabin at site option #1 , # 2,or #3. 3.5 miles hiking trail with development of cabin site option #1 or #2. Mooring buoy. All development during planning period 2 (1986-91).
No Name Cove	Moderate lodge/resort facility with capacity of 50-75 persons on optional sites #1 or #2. Marina with capacity of 15 cruiser-size boats and five 40-70 foot class vessels. Campground for backpack camping. Four miles hiking trail. 0.5 miles access road.
Williams Cove	0.75 miles of hiking trail in planning period 2 (1986-91).

The function of primitive campsites, public recreation cabin, trails, and mooring buoys is a identified in Alternative C. Development of a moderate lodge/resort would provide visitors wit a variety of services including lodging, meals, boat tours, and marina services including fuel. In addition, equipment rental and potential guiding services for fishing, hunting, hiking, and photography could be offered.

Alternative E

This alternative provides for a modest commercia lodge/resort with campground facilities and public recreation cabins.

The following facilities are proposed:

Site	Development Propose
Harbor Island	Public recreation cabin and mooring buoy.
Gilbert Bay	Public recreation cabin at site optio #1, #2, or #3. 3.5 miles hiking trail with development of cabi site option #1 or #2. Mooring buoy. All development during planning period 2 (1986-91).
Williams Cove	Moderate lodge/reso facility with capacity of 50-75 persons on optional site #1 or #2. Marina with capacity of 15 cruiser-size boats and five 40-70 foot class vessels. Campgroun with 15 units for backpack camping. Two miles of hiking trail. 0.25 miles access road.

The function of public recreation cabins, trails, and mooring buoys is as identified in Alternative C. The services provided by the lodge/resort area are as identified in Alternative D.

Alternative F

This alternative provides a mix of recreation facilities including primitive campsite, recreation cabin, and a major lodge/resort. The following facilities are proposed:

Site	Development Proposed
Harbor Island	Primitive campsites with pit toilets, tent sites, and mooring buoy.
Gilbert Bay	Public recreation cabin at site option #1, #2, or #3. 3.5 miles hiking trail with development of cabin site option #1 or #2. Mooring buoy. All development during planning period 2 (1986-91).
No Name Cove	Major lodge/resort facility with capacity of 150-200 persons on optional sites #1 or #2. Marina with capacity of 20 cruiser-size boats and six 40-70 foot class vessels. Docking facility for Marine Highway System ferries w/off loading ramp for vehicles. 30-unit campground with 10 backpack and 20 vehicle sites. Four miles hiking trail. Airfield option #1 (2500') or option #2 (5000'). Parking for 50 vehicles. 2 miles access road.
Williams Cove	0.75 miles of hiking trail in planning period 2 (1986-91).

The function of primitive campsites, public recreation cabin, trails, and mooring buoys is as identified in Alternative C. The services provided by the major lodge/resort would be similar to those identified for a moderate lodge/resort. However, they would be proportionately increased in magnitude to accommodate 150-200 visitors. The significant difference would be the increased transportation/access provided by the ferry terminal and airfield. The ferry terminal would accommodate passengers with vehicles. The airfield would provide wheeled plane access to the proposed development. The 5000 foot airfield would accommodate up to 727 jet access.

Alternative G

Like Alternative F, this plan proposes a major commercial lodge/resort development. However, public recreation cabins are the minimum recreation facility provided. The following facilities are proposed:

Site	Development Proposed
Harbor Island	Public recreation cabin and mooring buoy.
Gilbert Bay	Public recreation cabin at site option #1, #2, or #3. 3.5 miles hiking trail with development of cabin site option #1 or #2. Mooring buoy. All during planning period 2 (1986-91).
Williams Cove	Major lodge/resort facility with capacity of 150-200 persons. Marina with capacity of 20 cruiser-size boats and six 40-70 foot class vessels. Docking facility for Marine Highway System ferries w/off loading ramp for vehicles. 30-unit campground with 10 backpack and 20 vehicle sites. Airfield option #1 (5000') or #2 (2500'). Six miles hiking trail. Two miles access road.

The function of public recreation cabins, trails, and mooring buoys is as identified in

Alternative C. The services provided by the major lodge/resort would be similar to those identified for a moderate lodge/resort. However, as mentioned in Alternative F, they would be proportionately increased in magnitude to accommodate 150-200 visitors. The function of the ferry terminal and airfield is as identified in Alternative F.

NO ACTION ALTERNATIVE

A No Action alternative, as required by the National Environmental Policy Act (NEPA) of 1969, would maintain the study area in its present undeveloped condition.

V. Effects of Implementation

EFFECTS OF IMPLEMENTING NO ACTION

The implementation of No Action would maintain the study area in its present undeveloped condition as described in Section II, Affected Environment. The No Action alternative would contradict the TLMP commitment to offer 520 MMbf of timber for sale during 1980. In addition, it is estimated that implementation of No Action would reduce 32 full-time positions to part-time positions in the logging and processing industry.

The No Action alternative for recreation development would not enhance recreational opportunities in or encourage visitor use of the proposed Tracy Arms-Fords Terror Wilderness.

EFFECTS SIMILAR TO ALL ALTERNATIVES

CIVIL RIGHTS

Provisions included in all government contracts ensure that Native Alaskans and other individuals have equal employment opportunity to participate in and benefit from development activities.

Adverse impacts upon Native communities such as Angoon, Kake, or Hoonah are not anticipated.

EFFECTS OF IMPLEMENTING ALTERNATIVES A AND B

SOIL

Timber harvest and roading activity are planned to occur on two major landtypes within Gilbert Valley. Approximately 750 acres of moderate to steep (25-75 percent) sideslopes and 250 acres of nearly level (less than 10 percent) valley bottom soils are planned for harvest. Approximately 18 miles of road would be constructed on the valley sideslopes and two miles across the valley bottom.

All sensitive soil areas with high susceptibility for resource damage have been excluded from developmental activities. Noteable exceptions include V-notch road crossings and approximately two miles of proposed road on steep slopes. Special measures would be prescribed in these areas to prevent soil damage and attendant impacts. No significant long-term impacts to the soil resource are anticipated.

Short-term impacts on the soil resource, due to timber harvest and road construction, would occur. Some increased erosion, stream sedimentation, and decrease in soil productivity, due to mass wasting and soil surface disturbance, may result. The limited research information applicable to southeast Alaska's unique watershed characteristics prevents quantitative estimates of the degree and duration of these impacts. A qualitative description of potential impacts is provided.

Limited mass wasting may occur following timber harvest, due to potential increases in windthrow and reduction in soil binding strength resulting from deterioration of tree root systems. Greatest potential for soil mass failures occurs on slopes greater than 65 percent. The low incidence of natural mass wasting activity in Gilbert Valley indicates a low potential for harvest induced mass erosion. No slopes exceeding 75 percent will be harvested. No significant increase in mass wasting frequency is anticipated. Cutting unit layout is designed to reduce windthrow.

Approximately eight significant V-notch road crossings are planned for the sale area. V-notch drainages would pose significant management concerns to timber harvest and road construction. Potential for mass wasting and surface erosion is increased where V-notches are disturbed by roading or timber harvest activities. Soil material entering V-notches is often rapidly transported into larger, more productive streams. Proper road design alleviates significant impacts attendant to V-notch road crossings.

Soil surface erosion would be increased where mineral soils are exposed, surface drainages altered, and runoff concentrated. It is anticipated that 60-80 acres (six to eight percent) of soil surface disturbance due to harvest would occur. In addition, approximately 20 acres (1.0 acre/mile) of exposed soil would result from road construction. The extent and duration of increased soil erosion, attendant stream sedimentation, and decreased soil productivity due to surface disturbance should be minimal.

The additional roading required in Alternative B to access the log transfer facility (LTF) would cross two large V-notches, slightly increasing potential impacts. However, the difference between alternatives is small and no significant difference in impacts due to implementation of either alternative is anticipated.

AIR

It can be expected that the major source of air pollutants would originate from internal combustion engines associated with machinery used in a logging operation. Specifically, these would be identified as logging trucks, yarders, cats, gravel trucks, and power generation equipment at the camp.

At peak operation, visitors to the sale area may be aware of pollutants in the air. Noticeable would be the noise generated by the yarders and the attendant whistle signals, logging trucks, and the off-loading equipment at the LTF.

The impacts would be short-term, limited in scope, and confined to actual harvesting periods.

TRANSPORTATION

The proposed transportation system in this area would serve forest management objectives. Road development would facilitate timber management activities. In addition, recreation opportunities and mineral development would benefit from increased access.

WATER

Timber harvest can increase streamflows where significant portions of watersheds are harvested. However, harvest in Gilbert Valley would impact a small percentage of watershed areas (less than 10 percent) and the slopes from where the major source of water originates (the mid and upper elevations) would not be harvested. No increase in streamflows would occur due to timber harvest.

Timber harvest and roading activities potentially affect several water quality parameters. The most important parameters in southeast Alaska, because of fisheries concerns, are sediment and temperature. Many studies have been conducted throughout the United States, some of which showed short-term increases in suspended sediment and temperature. A few selected studies, are listed in Appendix G.

Increased stream temperatures due to logging generally occur only where streamside vegetation is removed. Susceptible streams within Gilbert Valley would be protected through retention of streamside vegetation.

Natural water quality within the study area, as evidenced by water quality monitoring in other areas of southeast Alaska, is highly variable. While significant impacts to water quality in Gilbert Valley are not anticipated, localized and short-term increases in sediment levels are possible. Minor increases in suspended sediment levels may occur during bridge and culvert installations. The application of mitigating measures in road construction greatly reduces the potential for significant water quality impacts. Any impacts which would occur would be within the range of natural water quality variability.

Differences in potential impacts between alternatives cannot be ascertained. Suspended sediment production from roads and its effects on water quality would be similar for both alternatives.

Wetlands and Floodplains

Executive Orders 11988 and 11990 direct that development on wetlands and floodplains be avoided where there is a potential alternative. No developmental activities are planned to occur within defined floodplains or wetlands. Road location over muskegs would be minimized to the extent possible.

VEGETATION

The distribution of commercial forest land and operability for the sale area is as follows:

TOTAL CFL	TOTAL OPERABLE CFL	TOTAL INOPERABLE CFL
6,155 acres	2,600 acres	3,555 acres

Approximately 1,000 acres of operable timber volume would be harvested in the initial entry. Included are approximately 50 acres of windthrow timber.

Present average volume growth for proposed harvest areas is approximately 20 cubic feet/acre/year because of over-mature condition of the stands. After clearcutting, volume growth is expected to exceed 130 cubic feet/acre/year. Harvested areas, left to regenerate naturally, are expected to average approximately 60 percent spruce and 40 percent hemlock.

Approximately 200 acres (units #15, 30, 32) of harvested area may present a potential natural restocking problem.

Alternative A

Potential for a slightly greater windthrow and mistletoe infestation hazard exists with this alternative.

Alternative B

This alternative would defer three small units included in Alternative A (units #7, 10, 13) and substitutes two units west of the proposed logging camp location (units #1a, 2a). These unit changes have no potential regeneration problems. This alternative would provide for a slightly more dispersed timber harvest.

WILDLIFE

There is potential for adverse impacts on the habitat of species such as deer, marten, and certain species of birds adapted to old-growth spruce-hemlock forests. No significant impact to deer is anticipated due to the provisions made for retention of wintering areas and travel corridors. Degree of potential impacts to marten populations are unknown. Short- and long-term impacts to bear are not well understood. It is anticipated that some bear travel corridors and use areas would be altered and potential bear/human encounters would be increased.

The proposed upland road would pose minimal adverse impacts to beaver habitat. A short-term disturbance to the beaver population would occur due to increased human activities. However, no long-term adverse impacts are expected.

Recreational and subsistence wildlife use would increase once logging is initiated. No impacts to waterfowl habitat would occur. However, short-term disturbance to waterfowl from human activity would be anticipated.

Marine mammals such as seals, sea lions, and whales should not be significantly disturbed by logging operations. However, some disturbances to marine mammals due to recreational boating associated with logging operations could occur. Harvesting operations would benefit some wildlife species. Certain small mammals (such as shrews and mice) and birds (such as songbirds) would benefit from harvest activities due to the creation of early successional vegetation.

No significant impacts to bald eagles will occur. Short-term disturbance of perching birds would likely occur due to increased human activity.

Alternative A

This alternative poses the least potential impacts on wildlife. Impacts unique to this alternative would be confined to minor disturbances associated with LTF and logging camp activity. Impacts to high use wildlife areas are minimized in this alternative. This is due to the spatial separation of camp and LTF from high value wildlife habitat.

The least impacts would occur at logging camp site option #1. This would insulate the camp somewhat from bear travel corridors and furbearer habitat near the beach (site option #2). Site option #3 would require an additional mile of road, thus impacting slightly more bear and furbearer habitat.

Alternative B

The camp location and LTF would have moderate impacts on wildlife. They are located on either side of a small estuary which is utilized by bear, furbearers, waterfowl, and nesting eagles. The bridge and road that access the LTF would pass by the upper end of the estuary and may pose a hinderance to movement of species between the estuary and uplands.

Additional disturbance to bear and waterfowl utilizing Sweetheart Flats could be anticipated due to additional logging traffic and camp activity at Gilbert Bay.

The potential for bear-human encounters would be increased with this alternative due to the proximity of the logging camp to bear habitat at Sweetheart Flats.

FISH

Major road crossing would occur on five fish streams (Table 5).

Table 5 - Fish Streams Crossed by Roads

ADF&G STREAM NO.	LOCATION OF CROSSING
111-35-30*	Upstream of salmon spawning habitat
111-35-32	Two crossings on separate forks
111-35-34	Crossing occurs near the upstream limit of salmon spawning habitat
111-35-36	Crossing occurs near the upstream limit of salmon spawning habitat
111-35-37	Upstream of salmon spawning habitat

*For location, see Appendix D

Logging and roading generally cause no significant long-term impacts to fish habitat and populations.

Short-term impacts of concern to fisheries are increased stream sediment levels and temperatures. Increased stream temperatures can occur where streamside vegetation is removed. Since vegetation near susceptible streams would be retained throughout the study area, no significant alterations in stream temperature are anticipated.

Fish eggs and emerging fry are most susceptible to increased stream sediment levels. While minor short-term increases in sediment from bridge and culvert placement may occur, sediment levels significant enough to impact eggs and fry are unlikely.

Localized potential impacts of a LTF are: 1) covering of benthic habitat with bark, other debris, and sediment; 2) lowering of the dissolved oxygen concentrations of some microhabits, and 3) the release of some wood leachates which are toxic to adult and larval shrimp and larval Dungeness crab. These impacts are generally minimal where adequate tidal flushing occurs. Acceptable flushing action is present at all sites.

Positive effects may result from potential gravel borrow pit development associated with logging road construction. Following extraction, some pits may be utilized as rearing ponds, thus enhancing the salmon rearing capability of Gilbert Valley.

Alternative A

This alternative will have a negligible potential for impacting commercially important marine communities. The LTF at Williams Cove would have fewer potential impacts than the LTF site in Gilbert Bay. This is due to the significantly lower biological productivity and superior tidal flushing action present in Williams Cove.

The USDI Fish and Wildlife Service (USF&WS) and the National Marine Fisheries Service (NMFS) have conducted investigations at the Gilbert Bay and Williams Cove LTF sites and have identified Williams Cove alternative as the most desirable. These reports are documented and are on file at the USDA Forest Service Office in Sitka, Alaska.

Alternative B

This alternative would have the greatest potential for adverse impacts to fisheries due to the high biological productivity of Gilbert Bay.

The LTF site proposed in Gilbert Bay was described as marginally acceptable by the USF&WS and NMFS personnel who have investigated the site.

VISUAL

Timber harvest operations in Gilbert Bay would impact the natural visual qualities of the landscape. Degree of impact is dependent upon location, size, shape, and intensity of clearcut harvest units and associated developments such as camps, roads, rock pits, and LTF. Logging activities located adjacent to major routes and recreation areas have a potentially greater adverse impact due to the high view sensitivity in these areas.

Proposed cutting units are designed to harmonize with the natural landscape when viewed from water travel routes in Tracy Arm and Port Snettisham and impacts are minimal. However, when proposed harvest activities would be viewed from foreground or middleground distances (closer than three miles) as from Gilbert Bay and the alpine areas adjacent to Williams Cove, present visual quality would be reduced.

The potential adverse impacts associated with rock pit development and road construction in the sale area would be minimized due to visual screening provided by vegetation.

Harvest operations produce both short-term and long-term adverse impacts. Short-term impacts result from the sharp visual contrast in color and texture between harvested areas and the existing landscape. Long-term adverse impacts

View of Gilbert Bay from Sweetheart Ridge alpine area.

result from loss of natural qualities, i.e., vegetation patterns inherent in the landscape, through successive harvest entries. The long-term impacts over full rotation for Alternatives A and B are similar (Table 6). Differences in impacts are attributable to location of the logging camp and LTF.

Table 6 - Long-Term Visual Management

Acres of Visual Quality Objective (VQO)

	Retention	Partial Retention	Modification	Maximum Modification	Total
*Inventoried VQO	50	5,285	13,019	349	18,703
Alternative A (campsite option #1) Adopted VQO	45	3,618	12,253	2,787	18,703
Alternative A (campsite option #2) Adopted VQO	10	3,168	12,253	2,822	18,703
Alternative A (campsite option #3) Adopted VQO	0	3,618	12,253	2,832	18,703
Alternative B Adopted VQO	50	3,168	12,253	2,782	18,703

*See Glossary - Visual Management System

Alternative A

This alternative has greater potential short-term adverse impacts on the visual resource resulting from first entry than Alternative B. Fewer acres meet the Inventoried Retention and Partial Retention Visual Quality Objective (VQO) (Table 7). Thus, alterations to the existing landscape may be slightly more apparent to the observer.

The logging activities associated with either of the optional LTF sites in Williams Cove would adversely impact the landscape viewed from the recreational boat route in Tracy Arm adjacent to the cove. The significance of this impact would vary depending on viewer sensitivity and proximity to activity. This development would adversely affect those visitors who anticipate a pristine undeveloped landscape while visiting the proposed Tracy Arm-Fords Terror Wilderness.

Table 7 - First-Entry Effects of Alternative A and B on the Visual Resource

		Acres of VQO				
	Alt.	Retention*	Partial Retention	Modification	Maximum Modification	Total
*Inventoried VQO		50	5,285	13,019	349	18,703
(campsite option #1) short-term visual mgmt./ Adopted VQO	A	45	4,346	13,156	1,156	18,703
(campsite option #2) short-term visual mgmt./ Adopted VQO	A	10	4,346	13,156	1,191	18,703
(campsite option #3) short-term visual mgmt./ Adopted VQO	A	0	4,346	13,156	1,201	18,703
Short-term visual mgmt./ Adopted VQO	B	50	4,463	12,947	1,233	18,803

*See Glossary - Visual Management System he optional logging camp sites #2 and #3 also reate potential adverse visual impacts by educing the Retention VQO. Both are located djacent to the optional LTF sites and would be xposed to view from the Tracy Arm boat route djacent to Williams Cove, intensifying potential dverse impacts. Logging camp site option #3 ould minimize visual impacts in the Williams ove area, as the proposed location is screened rom the observer in Tracy Arm and Williams Cove y natural vegetation.

lternative B

his alternative has fewer potential short-term dverse impacts on the aesthetic quality of the tudy area as compared to Alternative A. This esults from more acres meeting the Inventoried etention and Partial Retention VQO (Table 8). he harvest units are slightly more dispersed in his alternative, reducing the intensity of isual impact.

he proposed LTF and logging camp would be seen nly by visitors entering Gilbert Bay. The otential adverse visual impacts associated with hese facilities would be limited to small boat sers in Gilbert Bay and recreationists using roposed facilities in the area.

ULTURAL

lternative A

his alternative has some potential for impact on ultural resources. The proposed logging camp nd LTF sites are located in areas that were urveyed with some cultural indicators present i.e., pitch-cut trees). However, any impact ncurred from development would be negligible.

lternative B

his alternative has the least potential impact n cultural resources resulting from the low robability of sites occuring on steep forested reas, steep beach areas, and muskeg areas. herefore, the proposed logging camp and LTF ites have low potential for impact.

ILDERNESS

lternative A

evelopment of road access, LTF, and logging camp n Williams Cove is incompatible with Senate Bill R-39. In addition, the development of a logging amp at site option #2 and #3 is incompatible

The implementation of this alternative would result in an irretrievable loss of primitive recreation opportunities associated with Williams Cove. Long-term impacts would be attributable to the presence of a LTF in Williams Cove. Additional short-term loss of primitive values would result from timber harvest activities.

Alternative B

This alternative would have a minimal adverse impact on primitive recreation opportunities in the Williams Cove-Tracy Arm area. Occasional noise from equipment during harvest activities may reduce opportunities for solitude.

RECREATION

Timber harvest activities would result in both adverse and beneficial impacts on recreation. Long-term loss of primitive recreation opportunities would result from development activities.

Opportunities for enhancing recreation use would be provided. The road system would provide dispersed recreation opportunities for hunters, fishermen, hikers, and users of recreational vehicles.

Alternative A

This alternative could enhance potential development of a commercial lodge/resort in Williams Cove if logging camp site option #2 or #3 is implemented. Timber harvest developments such as breakwater, access road, water, sewage system, and camp site have potential for conversion to resort use. The breakwater constructed for a LTF in Williams Cove would offer a protection anchorage for recreational boats between harvest entries.

Alternative B

Potential short-term impacts would result from locating a camp and LTF in Gilbert Bay. Activities associated with these facilities could impact waterfowl hunting.

SOCIOECONOMIC

This section provides information regarding the costs and benefits associated with the proposed timber sale. Using present timber values and estimates of the cost of selling timber, including overhead, a benefit/cost ratio of 2.74:1 was calculated for Alternatives A and B

Direct sale related employment benefits that would accrue from implementation of the Recommended Action are estimated at 13 jobs throughout the year. Process related activities would provide 19 jobs throughout the year.

EFFECTS OF IMPLEMENTING ALTERNATIVES C, D, E, F, AND G

SOIL AND WATER

Potential impacts from development are anticipated to be low. The potential for soil mass wasting, accelerated erosion, and attendant stream sedimentation is negligible even in the case of major lodge development. Primitive campsites and recreation cabin installations and associated recreational use would have little, if any, impact on the soil and water resources.

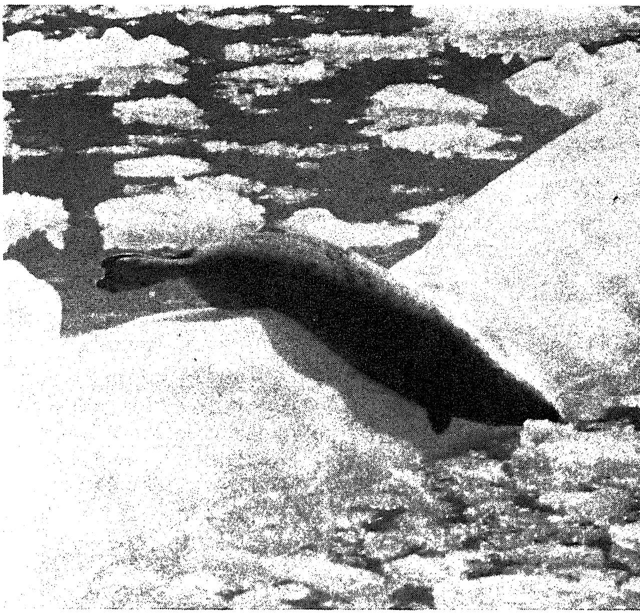
WILDLIFE

These proposals would result in increased visitor use of area, with an attendant increase in use and disturbance of fish and wildlife species, and potential increase in human-bear encounters. Cabin site option #3 at Gilbert Bay would insulate visitors most from bear, as well as most other wildlife species, minimizing adverse impacts.

Eagle nesting trees exist near all three optional cabin sites in Gilbert Bay. Potential disturbance of nesting eagles could occur from visitor activity. Adverse impacts are anticipated to be minimal.

Recreationists attempting to view seals, sea lions, and whales in Port Snettisham and Holkham Bay may disturb these marine mammals.

A cabin or primitive campsite on Harbor Island would have no significant impact on terrestrial wildlife.



Marine mammals are common in Port Snettisham and Holkham Bay.

Low flying aircraft providing visitor access to proposed recreational facilities in the study area may adversely affect waterfowl use on Sweetheart Flats. The level of disturbance woul generally increase proportionately with the intensity of development and resulting public us of proposed facilities.

Alternative C

This alternative poses the fewest potential adverse impacts to wildlife. Potential impacts, largely related to minor wildlife disturbances, would be limited in scope and duration.

Alternative D

This alternative poses low to moderate potential adverse impacts to wildlife. Wildlife disturbance by visitors would be the major contributing factor. Increased hunting pressure can be expected with development of public facilities. Lodge site option #1 would have the lease effect on wildlife. This site is farthest away from high use bear habitat. Road or marina development along the peninsula in No Name Cove may adversely affect bald eagle use of the peninsula for perching and nesting. The existence of nests is suspected on the peninsula and will receive further investigation during th 1980 Field Season.

Alternative E

Impacts to wildlife from the moderate lodge/resort in Williams Cove would be slightly less than Alternative D because of lower wildlife populations in this area. The hiking trail to Sweetheart Ridge would present little impact to wildlife, since it is located away from streams and beach fringe.

Lodge site option #2 is farthest away from bear trails, the creek (ADF&G No. 111-21-04), and Gilbert Balley, lessening direct impacts to wildlife.

Alternative F

This alternative poses significant potential for adverse wildlife impacts. Major impacts would be associated with airport and road construction between the only waterfowl resting and nesting ponds in the Holkham Bay area. Disturbance of wildlife by aircraft, vehicle, and visitor traffic could not be avoided.

Site Option #1 would insulate visitors more from bear activity near the stream and estuary in No Name Cove. However, this benefit may be offset by the additional road required to access this site.

The only suitable airfield location site for this facility sits between two areas of potholes and beaver ponds used by swans, geese, and other waterfowl. This could be a major disturbance to resting or nesting birds. Airfield option #2 would extend from the edge of one pothole area past the side of the other. This could put birds directly in the aircraft landing ortakeoff patterns. The service road required to access the airfield would be 2.5 to 3 miles long, and would dissect the two pothole areas.

Alternative G

Proposed airfield developments in this alternative could have significant adverse impacts. If airfield option #1 is constructed, significant impacts can be expected. The area proposed would require low-level takeoffs and approaches directly over Sweetheart Flats and the Gilbert Valley wetlands creating substantial disturbance to waterfowl. Bear and other furbearer populations would be disturbed due to aircraft and vehicle use associated with the proposed development.

Impacts from airfield option #2 would not be substantial. The site is removed from bear trails and the waterfowl habitat in Gilbert Valley. Little disturbance to wildlife populations should result. Potential for boater disturbance to marine mammal populations would be

FISH

Development of primitive campsites, recreation cabins, and trails poses few potential impacts the fishery resource. Potential short-term impacts that may occur include increased sport fishing and minor compaction of localized streamside areas resulting from visitor use.

No impacts are expected from placement of a mooring buoy in Gilbert Bay.

There would be no impacts to the fisheries resource from recreation development at Harbor Island.

Alternative C

Effects from the cabin, trail, and mooring buoy in No Name Cove would be negligible. Habitat quality is low and proposed developments are non-impacting.

Alternative D

Impacts expected from the moderate lodge/resort development at No Name Cove, site Option #1, would be minimal. The site is located away fro streams and intertidal areas. Sediment from construction activities would be negligible. Potential impacts at site option #2 would be slightly greater due to proximity to stream and intertidal areas. Fish populations in the cove may be subject to overharvest due to relatively small fish populations and projected increase i numbers of people using the facilities.

Marina development may cause impacts to the marine and estuarine habitat due to minor siltation from construction activities and potential gas and oil contamination. No significant long or short-term impacts are anticipated.

Alternative E

Impacts from moderate lodge/resort at Williams Cove would be minimal.

Effects may be attenuated due to the long-term operation of a lodge development; however, mari resources are relatively few in Williams Cove.

Marina development would cause impacts as described under Alternative D.

Potential impacts from site option #1 are increased sediment levels in the stream and this creek (ADF&G No. 111-21-04). Some adverse impacts would be alleviated by locating the lodge/resort at site option #2. No significant long or short-term impacts are anticipated.

Alternative F

Marina and major lodge/resort development at site option #2 in No Name Cove would cause the same type of impacts addressed in Alternative D, site option #2, only on a larger scale. Use of site option #1 would alleviate nearly all impacts associated with the lodge by locating it away from the stream. Potential impacts associated with marine development as described in Alternative D still occur.

It is not expected that the road or either airfield option would cause significant fishery impacts.

Alternative G

Potential impacts of a major lodge and marina development at Williams Cove would be somewhat greater than those discussed in Alternative E (option #2) due to the increased magnitude of development.

Airfield option #2 would cause few impacts. Airfield option #1 may increase sediment levels in Gilbert Creek, as large amounts of fill and heavy construction equipment would be required. The potential for sediment entering the stream would be slightly increased due to the airfield's proximity to smaller intermittent streams and muskegs that drain into fish streams.

VISUAL

The cabin proposed at Gilbert Bay would have a minimal impact on the visual resource. This facility would meet the Inventoried Visual Quality Objective of Partial Retention. The development of mooring buoys, trails, and primitive campsites would not adversely impact the visual resource. These facilities would meet the Inventoried Visual Quality Objectives (VQO) in the affected areas.

Alternative C

This alternative poses minimal long-term adverse impact on the visual resource (Table 8). While the cabin at No Name Cove would be seen by visitors using the anchorage in the cove, it would not be visible from the boat route in Tracy Arm. Construction materials would be seleted to harmonize with the surrounding landscape.

Table 8. Effects of Recreation Development Alternatives on the Visual Resource

	Acres of Visual Quality Objective (VQO)				
	Retention*	Partial Retention	Modification	Maximum Modification	Total
*Inventoried VQO	166	130	45	0	340
Proposed Management Adopted VQO:					
Alternative C	165	130	45	0	340
Alternative D	140	129	70	0	340
Alternative E	155	115	70	0	340
Alternative F w/ airfield option #2	21	36	190	0	340
Alternative G w/ airfield Option #1	145	36	159	0	340
Alternative G w/ airfield Option #2	145	16	179	0	340

* See Glossary - Visual Management System

Alternative D

This alternative poses medium potential adverse impacts on the aesthetic quality of the Tracy Arm area adjacent to No Name Cove. This is illustrated by the proposed management Adopted VQO's associated with the development (Table 8).

The construction of a marina facility in No Name Cove would create long-term adverse impacts to the aesthetic quality of the cove. The proposed lodge/resort would also create adverse visual impacts in No Name Cove. The impacts from resort site option #2 are minimized due to the natural enclosure of the cove. Resort site option #1 is exposed to travelers on Tracy Arm, posing significantly increased impacts to the visual resource.

Both short-term and long-term adverse impacts would result from the development of a moderate resort/lodge facility. Short-term impacts would occur from sharp visual contrast between areas cleared of vegetation for construction and the adjacent landscape. This contrast would remain until revegetation measures were introduced. New facilities such as a boat dock and structures would be constructed from materials which would blend with the surrounding landscape, but introduction of unnatural features in the landscape would result in long-term adverse impact.

Alternative E

This alternative poses fewer adverse impacts on the aesthetic quality of Tracy Arm than Alternative D. Fewer acres of Inventoried Retention VQO are impacted by the moderate lodge/resort proposed for Williams Cove (Table 8.)

The construction of a lodge/resort and marina in the cove would create long-term adverse impacts to the aesthetic quality of Williams Cove. Although the marina would be exposed to view from Tracy Arm, both site options #1 and #2 are at background viewing distances, minimizing potential impacts. A lodge/resort constructed at site option #1 or #2 would be partially screened by natural vegetation. However, the visibility of man-made structures in the landscape would result in both short-term and long-term adverse impacts as described in Alternative D.

The development of a public recreation cabin at Harbor Island would have a minimal long-term adverse impact on the visual resource. Although the cabin might be seen from a boat traveling in Holkham Bay or Endicott Arm, construction materials would be selected which would harmonize with the surrounding landscape.

Alternative F

This alternative would have adverse impacts on the aesthetic quality of the Tracy Arm area adjacent to No Name Cove. This is evidenced by the reduction of Retention VQO acreage resulting from developing the major lodge/resort facility proposed at No Name Cove (Table 8).

The development of a lodge/resort and marina in No Name Cove would create both short and long-term adverse impacts similar to those identified in Alternative D. However, the impacts associated with this alternative would be more intense due to the increased capacity of the marina and the addition of a ferry terminal.The impacts of the lodge/resort structure would also be more severe due to the increased magnitude of development. The impacts associated with site option #1 would be somewhat greater than those of site option #2, as this location would be visible from more of the recreational boat route in Tracy Arm.

The proposed airfield option #2 would create greater long-term adverse impacts when compared to option #1. This would result from the required clearing of vegetation to the beach line at each end of the airfield. The clearing would be apparent by all recreationists traveling in Tracy Arm.

Rock pit development associated with this alternative would create long-term adverse impacts on the visual resource. The volume of rock required for construction of the resort, roads, and airfield would necessitate large open pit quarry development. Although exact locations of rock sources have not been determined, potential sites are visible from the boat route in Tracy Arm. Impacts would include color contrast between exposed rock surfaces and surrounding vegetation and the creation of unnatural alterations to the landscape.

Alternative G

This alternative poses fewer adverse impacts on the aesthetic quality of the landscape viewed from the boat travel route in Tracy Arm than Alternative F. This is because fewer Retention VQO acres would be affected by proposed major lodge/resort facilities in Williams Cove (Table 8).

The proposed marine would create long-term adverse impacts, as this facility would be seen from the boat route in Tracy Arm. The effects would be similar to those described in Alternative E, but the impacts would be more intense due to the increased capacity of the marine and the addition of a ferry terminal. In addition, the proposed lodge/resort would create both short and long-term adverse impacts similar to those described in Alternative D.

The development of airfield option #1 would result in a lower adverse impact when compared to option #2 (Table 8). Fewer partial retention VQO acres would be impacted.

Rock pit development associated with this alternative could create long-term adverse impacts on the visual resource as described in Alternative F. Although exact locations of rock sources have not been determined, it is assumed that rock sources may be available in the proposed timber sale area. These sources would be screened from the boat route on Tracy Arm by vegetation, reducing potential adverse impacts.

CULTURAL

All recreation development alternatives pose high potential for adverse impacts to the fox farm on Harbor Island due to the proposed construction of a public recreation cabin or primitive campsites.

No impacts are anticipated from potential recreational development at No Name Cove, Williams Cove, or Gilbert Bay.

RECREATION

Trails proposed under all alternatives would result in long-term benefits to recreational visitors. All trails offer increased opportunities to access to high quality alpine hiking and dispersed recreation opportunities. Use of trails would range from low to high depending on the level of adjacent recreation facility development.

Mooring buoys would have long-term positive effects on recreation by providing increased security and safety to recreational boaters.

Cabin development would provide minimal visitor comfort, convenience, and safety. Based on use records for existing saltwater cabins, public use would range between 240 and 400 persons per cabin per year (Table 9).

Table 9 - Recreation Capacity and Estimated Visitor Use of Proposed Recreation Facilities.

Facility	Daily Capacity	Season Of Use	Visitor Use	Annual Capacity
	persons	days	persons/year	persons
Primitive Campsite	5	184	200	920
No Name Cove Cabin	6	184	240	2,190
Gilbert Bay Cabin	6	184	400	2,190
Moderate Lodge/Resort	135	120	3,500	16,200
Major Lodge/Resort	320	120	10,000	38,400

Impacts resulting from cabin development at Gilbert Bay would vary depending on the site selected. Site option #2 would provide the best access to recreational opportunities, including the proposed trail to Sweetheart Ridge, waterfall on Sweetheart Creek, freshwater fishing, and hunting on Sweetheart Flats. Cabin site #1 would require an additional mile of trail to access these opportunities. Recreation opportunities would be reduced at cabin site option #3 due to limited access. This results from the tidal flats separating the site from Sweetheart Creek and Sweetheart Ridge.

Development of a public cabin would result in short-term conflicts between cabin users and residents of the logging camp.

Alternative C

This alternative enhances the opportunities for dispersed recreation in the study area. Development of proposed facilities would provide long-term benefits to recreation. This alternative provides facilities most compatible wth present recreational use.

Development of a recreation cabin at No Name Cove would enhance recreational use of the Tracy Arm area. Based on records of public use at other saltwater cabins, it is estimated that year-round use of this facility would reach 60 nights, with parties averaging four persons (Table 9). The proposed trail at No Name Cove would provide visitors with an opportunity to explore the alpine ridge leading to Meigs Peak, which offers a scenic view of the surrounding area. Use of the trail is anticipated to be low. The proposed trail at Williams Cove would access the logging road, thus expanding opportunities for inland recreational activities.

Impacts from a primitive campsite development at Harbor Island are long-term but of very low intensity. Based on observation of current use patterns, it is estimated that a campsite development would create a minimal increase over present use levels. Consequently, the primitive character of Harbor Island would be retained. It is estimated that the season of use would be from May 1 through October 31 (Table 9).

Alternative D

The implementation of this alternative may adversely impact primitive recreation opportunities in the Tracy Arm/Holkham Bay area. This would result from a significant long-term increase in public use of the area associated with moderate lodge/resort development at No Name Cove (Table 10).

Table 10 - Recreation Capacity and Estimated Visitor Use of Proposed Recreation Alternatives.

Alternative	Estimated Visitor Use	Daily Capacity	Annual Capacity
	persons/year	persons	
C	840	17	5,300
D	4,100	147	19,310
E	4,200	147	20,580
F	10,600	332	41,510
G	10,700	332	42,780

A moderate lodge/resort would have a total annual output capacity of 16,200 persons including a campground capacity of 6,000 persons (Table 9). Estimated actual use is 70 percent of capacity (Appendix I).

As described in Alternative C, the proposed trails would provide visitors with an opportunity to explore the alpine ridge leading to Meigs Peak and access inland recreational opportunities in Gilbert Valley.
This alternative would provide a facility which would expand visitor use of the adjacent proposed Tracy Arm-Fords Terror Wilderness. Facilities such as the lodge/resort, marina, and campground would provide visitor conveniences and accommodations not now available.

Alternative E

The long-term adverse impacts on primitive recreation opportunities in the Tracy Arm/Holkham Bay area would be similar to those described in Alternative D. These impacts would result from a significant increase in public use of the area attributable to development of a moderate lodge/resort facility in Williams Cove (Table 10).

Benefits of implementing this alternative are similar to those identified in Alternative D.

The proposed trail to Sweetheart Ridge would provide lodge/resort visitors with an opportunity to explore an alpine area and view scenic Tracy Arm. Development of a lodge/resort at site option #1 would preclude use of Williams Cove for future timber harvesting activities, requiring a LTF in Gilbert Bay.

Alternative F

Primitive recreation opportunities in the Tracy Arm/Holkham Bay area would be significantly reduced following implementation of this alternative. This would be attributable to the high concentration of public use associated with a major lodge/resort facility (Table 9). The major lodge/resort would have an annual total output capacity of 38,400 persons including a campground capacity of 14,000 persons (Table 8). Estimated actual use would be 80 percent of capacity (Appendix I).

A major lodge/resort and marina at No Name Cove would create long-term adverse impacts similar to those identified in Alternative D, but more intense due to the increased magnitude of development and related public use. Activities associated with airfield operations would further diminish primitive recreation opportunities in the affected area.

Site option #1 would provide visitors with an outstanding view of Tracy Arm and Endicott Arm. As described in Alternative C, the proposed trails would provide visitors with an opportunity to explore and experience the alpine environment leading to Meigs Peak and access inland recreational opportunities in Gilbert Valley. Additional benefits provided by the implementation of this alternative are similar to those described in Alternative D. However, the increased level of accommodations, services, and convenience provided would further enhance concentrated recreational use.

Alternative G

The potential loss of primitive recreation opportunities in the Tracy Arm/Holkham Bay area resulting from the implementation of this alternative would be similar to Alternative F. The loss of opportunities would result from the high concentration of public use associated with a major lodge/resort in Williams Cove (Table 9).

A major lodge/resort and marina at Williams Cove would create potential long-term adverse impacts similar to those identified in Alternative E, however, the impacts would be more intense due to the increased magnitude of development and related public use.

Activities associated with airfield operations would further diminish primitive recreation opportunities in the affected area.

In addition to a hiking trail to Meigs Peak, this alternative would provide a trail to Sweetheart Ridge, enhancing recreational opportunities for exploring alpine areas and viewing Tracy Arm.

The increased level of accommodations, services, and conveniences provided by this alternative would enhance recreational use as identified in Alternative F.

WILDERNESS

Alternative C would be consistent with existing and future management objectives for the proposed Tracy Arm-Fords Terror Wilderness. Trails would result in positive long-term effects on wilderness management and would compliment wilderness use and enjoyment. Mooring buoys would provide safety and visitor security.

Primitive campsites are consistent with wilderness management. These facilities provide benefits to facilitate visitor use of the wilderness area without imposing adverse impacts to wilderness values. Cabins proposed would enhance visitor experience and access to wilderness areas. Minor impacts on localized wilderness values would result from cabin use.

Short-term impacts associated with cabin and campsite use, such as wood smoke, boat activity, and beach activities would reduce the primitive character of the land in the vicinity of the activities.

Adverse impacts to wilderness values resulting from the development of lodge/resort facilities would be minimal. Human use would be primarily limited to water travel routes, thus having no physical impact on the land. However, opportunities for solitude and associated wilderness values would be diminished adjacent to these travel routes.

Alternative C

This alternative would cause no adverse impacts on wilderness values. Planned facilities would enhance public use of the proposed Tracy Arm-Fords Terror Wilderness.

Alternative D

Increased use of the proposed Tracy Arm-Fords Terror Wilderness resulting from a moderate lodge/resort in No Name Cove would include four or five resort-operated cruise boats, approximately 23 private boat day visits, and five airplane tours each week (Appendix I). Auditory and visual impacts from boat and airplane traffic in the vicinity of the resort would result in short-term adverse impacts on wilderness opportunities in adjacent areas.

Alternative E

Adverse impacts on the wilderness characteristics associated with Tracy Arm would be slightly reduced when compared with Alternative D. This is attributable to the proposed Williams Cove development location, which is approximately three miles from the main recreational travel corridor in Tracy Arm.

Alternative F

A major lodge/resort in Williams Cove would result in greater potential adverse impacts on wilderness values. Services provided would result in considerably greater activity on waterways, thus impacting adjacent wilderness values. In addition, airplane activity associated with the proposed airfield would adversely impact wilderness values. Additional use of the proposed Tracy Arm-Fords Terror Wilderness, attributable to the implementation of this alternative, would include approximately 13 resort-operated cruise boats, 58 private boat day visits, and 14 airplane tours each week (Appendix I). Auditory and visual impacts adjacent to the resort described in Alternative D would be intensified by the increased magnitude of proposed development.

Alternative G

This alternative would have effects similar to Alternative F. However, adverse impacts on the wilderness characteristics associated with Tracy Arm would be slightly reduced when compared with the major lodge proposal for No Name Cove, as the Williams Cove site is approximately three miles from the primary travel corridor in Tracy Arm.

SOCIOECONOMIC

An economic analysis comparing the implementation of proposed recreation development alternatives is found in Appendix J. This analysis established that the economic returns to the government from recreation development alternatives is speculative.

Table 11 - Benefit/Cost Analysis of Recreation Alternatives

Alternative	Benefit /Cost Ratio	Estimated Cost*
		thousands of dollars
C	.056:1	169-291
D	.700:1	3,614-3,736
E	.774:1	3,225-3,587
F	.390:1	12,010-18,888
G	.390:1	12,296-18,914

*Appendix K

The socioeconomic benefits to the public that would result from the development of a lodge/resort are as follows:

1. Public safety would be enhanced by the availability of a communication center in a remote area.

2. Recreational access to a remote area would be enhanced by the availability of fuel and associated services.

3. Opportunities for dispersed recreation would be increased.

4. Employment opportunities would be provided at the lodge/resort.

5. Pressure from tourism on Glacier Bay National Monument would be reduced by providing an alternative facility.

6. Tourism in southeast Alaska would be enhanced. Juneau would serve as a base for access to a lodge/resort, thus stimulating local economy through various services offered (i.e., accommodations, air charter service, boat charter service, etc.). Providing an alternative for package tours would enhance international tourism.

7. A lodge/resort would service travelers between Petersburg and Juneau.

8. A lodge/resort would provide access for touring the west side of Admiralty Island.

With secondary consideration given to economic return to the government, a lodge/resort development would provide the best service to the public through increased access, accommodations, conveniences, and local economic stimulation. Alternatives F and G would provide the greatest socioeconomic benefit due to the increased magnitude in development when compared to Alternatives D and E.

MITIGATING MEASURES AND MANAGEMENT REQUIREMENTS

All management activities shall be consistent with laws, regulations, and guidelines such as are found in the Chatham Area Project Guidelines, Southeast Area Guide, the National Forest Management Act (PL-94-588), Endangered Species Act of 1973 (PL-93-205), and Executive Orders applicable to protection of Floodplains and Wetlands (EO-11990 and 11988).

General location of all developmental activities is addressed in this statement. However, the flexibility to make adjustments in specific site locations of developments such as bridges, culverts, and rock quarries is maintained to provide maximum resource protection. The Interdisciplinary Team (IDT) would perform on-site reviews for specific site selections. These reviews would document selected sites, assess impacts, and prescribe mitigating measures.

Examples of mitigation measures and management requirements which would be implemented by the IDT for timber harvest activities and recreation development in the Gilbert Bay/Holkham Bay area are as follows:

SOIL

1. Slopes greater than 65 percent would be assessed by a soil scientist for inherent slope stability. Slopes identified as unstable would not be harvested. Slopes greater than 75 percent would not be harvested.

2. All large V-notch road crossings would be reviewed by a soil scientist. Least impacting crossings would be selected and construction techniques to minimize disturbance would be employed.

3. All disturbed soil areas with the potential of increasing stream sedimentation would be grass seeded for erosion control.

4. Valley bottom soils and streamside areas proposed for harvest would be reviewed by a soil scientist and special harvest methods (tractor logging over snow, full log suspension) prescribed where necessary.

5. Proposed roads on slopes exceeding 35 percent would be assessed for susceptibility to slope failure. Endhauling of cut and fill material, grass seeding of road banks or special bank stabilization measures prescribed where necessary.

WATER

1. All major stream crossings would be designed to pass at least the estimated 25-year storm.

2. All major wetlands and floodplains in the valley bottom would be avoided.

3. All major stream crossing locations would be reviewed by the IDT for selection of the most stable crossing.

4. Special attention would be given to road location and bridge construction techniques where roads cross unstable landforms, such as alluvial fans.

5. Numerous other mitigating measures, as contained in the Chatham Area Project Guidelines, would be carried out where soil and water conditions warrant. THe primary intent of the Guidelines is to reduce the potential for erosion/sedimentation.

VEGETATION

1. All harvested areas would be regenerated within five years. Silvicultural activities (i.e. brush reduction, slash burning, etc.) needed to establish regeneration would be done where necessary.

2. Conifer planting and/or release would be done to establish second growth where required.

3. Treatments to control spread of insects or disease infestations would be implemented where necessary.

4. Silvicultural practices to enhance second growth stands, such as precommercial and commercial thinning, would be performed where applicable.

5. Salvage operations to recover blowdown and diseased timber would occur when necessary.

6. Units will be located only where they would not block future access to other operable timber.

WILDLIFE

1. Approximately 2500 acres of fish and wildlife retention zone would be provided in Gilbert Bay for protection of dependent species.

2. Unit design and layout would provide leave strips for general habitat use and as access corridors for wildlife. Major wildlife corridors will be protected.

3. Any plant or wildlife species which is recognized as a sensitive species or classified as threatened or endangered would be protected.

FISH

1. Fish stream crossings would be reviewed by a fish biologist to assure a structure design that would pass fish and determine proper timing for installation.

2. Fishery biologists would assist in locating most desirable stream and V-notch road crossing locations to minimize potential downstream effects.

3. Streamside buffer strips would be established on all major salmon spawning streams.

4. Proposed logging units and road locations were reviewed by fishery biologists to assure proper location and design for fish protection.

5. Several additional water quality protection measures applicable to fish protection are addressed in soil and water section.

VISUAL

The location, design, and rehabilitation of LTF's, roads, logging camp, and rock quarries would conform to adopted visual management standards. All management activities would be designed to meet the Adopted Visual Quality Objectives associated with the Recommended Action.

1. All materials used in construction would harmonize with the surrounding environment.

2. Areas disturbed from recreation construction activities would be revegetated as appropriate.

CULTURAL

If cultural resources are encountered during construction activities, operations would cease immediately in the affected area until a qualified representative of the Federal Government evaluates the resource and implements mitigation measures if appropriate.

TRANSPORTATION

The entire road system would be kept open to foot travel. Minor vehicle traffic will generally be allowed on these roads, with roads not open to vehicle use being closed by use of the Secretary's Regulations (36 CFR 212). Bridges across streams with fisheries values or major structures will be constructed of materials or techniques to provide a design life of 4 years or longer, as per current policy. The materials and construction techniques for the log transfer site will be evaluated based on the long-term needs for all resources, including recreation, fisheries, and timber.

MONITORING

Management activities would be monitored to insure that: (1) Environmental safeguards are executed according to plan, (2) Necessary adjustments are made to achieve desired environmental effects, and (3) Anticipated results and protections are achieved. The following monitoring requirements are recommended by the IDT.

SOIL

Soil scientists would review on-going developmental activities within the study area. Field reviews to assure developmental compliance with Chatham Area Project Guidelines, contractual requirements, and prescribed mitigating actions would be conducted on a regular basis.

WATER

All pertinent aspects of the timber harvest activity would be reviewed by a hydrologist with site-specific prescriptions and identification of unanticipated problems prior to September 1 of each field season. Special attention would be given to stream crossings and streamside harvest areas. Review findings would be summarized and necessary corrective actions taken, where possible, by October 1 of each year.

VEGETATION

Monitoring for potential insect, disease, and blowdown damage would occur.

Regeneration surveys would be required to ensure harvested areas are adequately stocked within five years of harvest.

During harvest activities a Forest Service officer would make on-site inspections to ensure compliance with the contract.

WILDLIFE

On-site inspections would be conducted to evaluate harvesting impacts on wildlife and expand inventory data. Reviews would assess compliance with mitigation measures as well as adequacy of wildlife retention areas.

FISH

Site inspections would be conducted to evaluate culvert and bridge installation.

VISUAL

Monitoring would include preparation of progress evaluation reports which will indicate whether or not Adopted Visual Quality Objectives have been met and would identify required rehabilitation measures where applicable.

CULTURAL

The monitoring program would consist of periodic on-the-ground evaluation reports. The reports would relate whether or not those guidelines set by State and Federal laws pertaining to the protection, maintenance, and restoration of cultural resources have been met, and recommend mitigation programs where applicable.

RECREATION

Recreational use areas and facilities would be inspected during construction and routine maintenance operations.

TRANSPORTATION

On-site monitoring for road construction compliance with contractual, Area, and Regional guidelines would occur.

VI. Evaluation of Alternatives

EVALUATION OF NO ACTION

TIMBER HARVEST

The Tongass Land Management Plan (TLMP), which included extensive public involvement, allocated the Gilbert Bay area for a combination of commodity and amenity development (Appendix C). Gilbert Valley is identified for independent timber sale activity during the intial five-year planning period. The No Action alternative would fail to comply with this management direction.

RECREATION MANAGEMENT

The Holkham Bay/Tracy Arm area has been allocated by TLMP for developed recreation and destination sites for use by visitors to the nearby proposed Tracy Arm-Fords Terror Wilderness. A No Action alternative would contradict TLMP management direction and public expectation for increased access and accommodations to enhance visitor use of the proposed Wilderness.

EVALUATION OF TIMBER HARVEST AND RECREATION ALTERNATIVES

EVALUATION CRITERION #1

Provide development which would enhance and be compatible with recreational use of Holkham Bay and the proposed Tracy Arm-Fords Terror Wilderness.

Comparison of Alternatives

Timber Harvest Alternatives

Both Alternative A and B propose road development that would increase accessibility to dispersed recreation activities. This development would be compatible with existing recreational use of the study area. Alternative B best meets this criterion in that impacts to visual quality and primitive recreation opportunities in the Holkham Bay and proposed Tracy Arm-Fords Terror Wilderness would be minimized. No road or log transfer facility (LTF) would be constructed in the Williams Cove (LUD II) area.

Recreation Alternatives

Alternative C would provide a minimal level of public access, safety, and accommodations. This alternative is most compatible with existing recreational use. However, recreational use of the area would not be significantly increased above present levels. Alternatives F and G would greatly increase recreational use of this area. However, the IDT determined airstrip development proposed in these alternatives would not be compatible with recreational use of the area.

Alternatives D and E best meet this criterion. These alternatives would significantly enhance recreational use of the area and developments proposed are compatible with recreational use of the area.

EVALUATION CRITERION #2

Minimize potential adverse impacts on the quality and productivity of the following resources: soil, water, visual, cultural, wildlife, fisheries, timber, recreation, and wilderness.

Comparison of Alternatives

Each alternative is designed to provide protection of all resources to the maximum extent possible. All alternatives were developed under the same management guidelines. Differences in resource impacts are due largely to intensity of development, facility locations, and spatial relationship of facilities to high resource value areas. A detailed discussion of the resource impacts relative to each alternative is contained in Effects of Implementation (Section V).

Timber Harvest Alternatives

Potential adverse impacts to fisheries, present recreational use at Gilbert Bay, and to a minor degree wildlife and soils, would be least if Alternative A were implemented. Potential adverse impacts to primitive recreation opportunities and the visual resource would be least if Alternative B were selected.

After weighing the degree of impacts on all resources, the IDT identified Alternative A as providing the greatest resource protection. This determination was made due to the increased protection provided to the Gilbert Bay marine environment by this alternative.

Recreation Alternatives

Potential adverse impacts to wildlife, wilderness opportunities, visual resource, and to a lesser degree soils, fisheries, and cultural would be least if Alternative C is implemented.

The provision of recreation facilities for larger numbers of the public would be greatest if Alternative D, E, F, or G is implemented.

However, the degree of adverse environmental impacts increased proportionately to the intensity and magnitude of development. Consequently, the IDT identified Alternative C as best minimizing potential adverse impact.

EVALUATION CRITERION #3

Provide development which complies with LUD II and Forest Service management requirements for Federal Land Policy and Management Act (FLPMA) withdrawal areas.

Comparison of Alternatives

Timber Harvest Alternatives

Alternative B best meets this criterion. This alternative proposes no development in LUD II or FLPMA withdrawal areas. Alternative A does not meet this criterion due to proposed LTF and road construction within the LUD II and FLPMA withdrawal area.

Recreation Alternatives

All proposed recreation alternatives comply with LUD II management requirements. Although the lodge/resort developments proposed in Alternatives D, E, F, and G would not comply with present Forest Service management requirements for FLPMA withdrawal areas, up to 160 acres has been identified in Senate Bill HR-39 for recreational development in the Holkham Bay/Williams Cove withdrawal area. If the FLPMA withdrawal is extended by the Secretary of Interior beyond December 1980, the Secretary of Agriculture could allocate a site in either Williams cove or No Name Cove for recreational development.

Alternative C would comply with LUD II and Forest Service management requirements for FLPMA withdrawal areas. Development of a recreation cabin at No Name Cove and primitive campsite at Harbor Island would not affect the undeveloped character of the Holkham Bay/Williams Cove area. Thus, Alternative C best meets this criterion.

EVALUATION CRITERION #4

Provide acceptable effects with regard to timber harvest and management on potential recreational development in the Holkham Bay/Tracy Arm area.

Comparison of Alternatives

Timber Harvest Alternatives

Alternative A provides benefits to recreation development in Holkham Bay only if recreation Alternative E or G is selected. Recreational development could occur at the LTF site, with ready access to Gilbert Valley provided by the proposed road system. Alternative A would cause detrimental effects to recreational development proposed in Alternatives C, D, and F, through impact on visual quality and primitive recreation opportunities in the Williams Cove area. Alternative B is compatible with all of the recreation development alternatives.

Alternative A would best meet this criterion if either recreation development Alternative E or G is implemented. If recreation Alternative C, D, or F is implemented, Alternative B would best meet this criterion.

EVALUATION CRITERION #5

Provide significant socioeconomic benefits from proposed development.

Comparison of Alternatives

Timber harvest Alternatives

Preliminary appraisal indicates both Alternatives A and B provide identical socioeconomic benefits.

Recreation Alternatives

Alternatives F and G have the potential for providing the greatest socioeconomic benefits to Juneau and surrounding areas. Alternatives D and E would also provide significant socioeconomic benefits. Alternative C would provide a low level of socioeconomic benefits.

EVALUATION CRITERION #6

Provide a logging camp location which will not adversely impact fish streams, wildlife habitat, air, water, and visual quality, while providing a healthy and safe environment and access for residents.

Comparison of Alternatives

Timber Harvest Alternatives

From the detailed analysis contained in "Effects of Implementation" it was apparent impacts. It was the decision of the IDT, however, that both timber harvest alternatives propose acceptable campsites and acceptable resource protection is afforded in either alternative. Due to slightly fewer adverse impacts on the environment, Alternative A best meets this criterion.

EVALUATION CRITERION #7

Provide development which is compatible with public expectations expressed during the public involvement process.

Comparison of Alternatives

Timber Harvest Alternatives

The Tongass Land Management Plan allocated Gilbert Bay for timber harvest activities. Extensive public involvement was incorporated into the development of this management plan. Most public response in comparison of Alternative A and B has favored implementation of Alternative A. This is due primarily to public concerns regarding impacts on biological and recreational values presently found in the Gilbert Bay area.

Recreational Alternatives

Most public response to recreational development alternatives has favored implementation of Alternative C. Most individuals see primitive campsites and recreation cabins most compatible with their perceived uses of the proposed Tracy Arm-Fords Terror Wilderness.

The IDT does, however, recognize the interest in lodge/resort development expressed by the City and Borough of Juneau through Resolution 423 (Appendix B). Alternatives D, E, F, and G are most compatible with this resolution.

VII. Identification of the Recommended Action

RECOMMENDED ACTION

DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Interdisciplinary Team (IDT) selected timber harvest Alternative B, issuance of a prospectus for private capital lodge/resort development in Williams Cove or No Name Cove, and a recreation cabin at Gilbert Bay as the Recommended Action. The recreation cabin at Gilbert Bay would be planned following the timber sale in the second five-year planning period (1986-91). Future trail access from the cabin to Sweetheart Ridge would be provided if warranted by substantial public use of the cabin. The Recommended Action was selected for the following reasons:

1. Until the land management status of Williams Cove is finalized, the Forest Service management direction is to maintain the primitive character of this area, except for possible recreation development provided for in the legislative proposals before Congress. Implementation of timber harvest Alternative B would not alter the primitive nature of Williams Cove.

2. The log transfer site originally considered adjacent to Sweetheart Flats, an area meriting special attention, has been moved north approximately two miles.

3. Lodge/resort development would potentially provide considerable socioeconomic benefits to Juneau and the rest of southeast Alaska. While lodge/resort profitability may be marginal, the clearest indicator regarding profitability will be the response of private resort operators to the prospectus.

4. Lodge/resort development would substantially enhance public recreational use of the Tracy Arm-Fords Terror area through increased access, conveniences, and accommodations.

5. Recreation cabin development at Gilbert Bay would increase dispersed recreation opportunities in the Gilbert Bay/Port Snettisham area.

6. The IDT recognized that certain developments proposed in the recreation alternatives, such as an airfield, were environmentally unacceptable. The IDT has developed parameters within which the

A. Mimimum development

(1) Overnight accommodations for 20 persons.

(2) Store providing staple food items.

(3) Public fueling facility.

(4) Radio communications with Juneau.

(5) Boat/float plane dock (250 linear feet)

(6) Four to six passenger tour boat

B. Maximum development

(1) Overnight accomodations for 150 persons.

(2) Full-service store.

(3) Boat and equipment rental.

(4) Twenty tent campsites.

(5) Boat/float plane dock (1000 linear feet).

A lodge/resort facility developed within these parameters would cause minimal adverse environmental impacts while providing substantial socioeconomic benefits and visitor convenience and safety.

FINAL ENVIRONMENTAL IMPACT STATEMENT

The IDT developed the alternatives described in this statement based upon the public issues involved and the political and environmental constraints associated with the areas in which the proposed activities are planned to occur.

Public response to the DEIS reinforces past public concern that the logging camp and LTF should not be located close to saltwater in Gilbert Bay. Based upon this response and pending Congressional legislative proposals, the IDT has adjusted the balance between the complicated issues involved and changed the Recommended Action accordingly. The IDT Recommended Action has been revised to include the following:

Timber Harvest

1. Timber harvest Alternative A.

2. Logging camp development at site option 1, located in the LUD III area.

ecreation Development

1. Issuance of a prospectus for private apital lodge/resort development in Williams ove or No Name Cove. The parameters within hich the prospectus would be offered are reviously identified under RECOMMENDED ACTION - DRAFT ENVIRONMENTAL IMPACT STATEMENT. The ocation of potential development in Williams ove is identified in Part 2, Recreation evelopment Alternative E, site option 2. The ocation of potential development in No Name ove is identified in Recreation Development lternative D, site options 1 or 2.

2. Public recreation cabin at Gilbert Bay, ite options 1, 2, or 3. The recreation cabin ould be planned following the timber sale in he second five-year planning period (1986-91).

3. Future trail access from the cabin to weetheart Ridge would be provided if warranted y substantial public use of the cabin.

he rationale for the IDT selection of this ecommended Action is based on the following:

1. It meets the majority of public opinion hich recommends that developments such as a ogging camp and LTF be located in the Williams ove area, thus separating them from the highly alued marine environment in Gilbert Bay.

2. No impact from development of a logging amp and LTF will occur in Gilbert Bay. nitial access from Williams Cove for timber arvest activities will require a minimal emporary camp and approximately 12-15,000 ubic yards of rock or beach borrow to access a ajor rock source in the LUD III area for evelopment of a logging camp there. Less than 500 feet of road will occur in the LUD II area.

3. The Tsongas amendment No. 626 to the roposed Senate Bill HR-39 excludes Williams ove and No Name Cove from Wilderness esignation. In addition, HR 39 excludes illiams Cove from Wilderness. It was not ecommended for Wilderness in RARE II.

4. The present FLPMA Segregation Order ffecting the Williams Cove area will expire ecember 5, 1980. Unless extended, this area ill then be managed in accordance with Tongass and Management Plan LUD II management irection. Although the timber sale will be ffered to the public prior to September 30, 980, all development activities in the LUD II rea will be delayed until December 6, 1980 or ater. However, development could be permitted rior to that date should Congressional egislation be enacted which supersedes the resent FLPMA Segregation Order.

5. Only transportation facilities requirec to protect other resource values in the Gilber Bay estuarine area are authorized in Williams Cove LUD II area. Tongass Land Management Plar LUD II management direction, provides for vita transportation linkages with regard to road development. The IDT considers the minimal road construction in LUD II required to access the Williams Cove LTF as meeting this criteria. The resulting protection afforded t the highly valued marine environment in Gilber Bay supports this rationale.

ENVIRONMENTALLY PREFERRED ALTERNATIVES

The IDT identified timber harvest Alternative with logging campsite option #1 and recreation Alternative C as the environmentally preferred alternatives.

The environmentally preferred alternatives would provide maximum protection to the marine environment of Gilbert Bay. However, visual quality and primitive values associated with the Williams Cove/Tracy Arm area would be slightly reduced, due to the location of the proposed log transfer facility and associated activities at the head of Williams Cove.

VIII. Consultation with Others

Public involvement in the preparation of this document was conducted in two phases. The first phase began early in 1979, as part of the preparation of the Environmental Assessment (EA) for Gilbert Valley. The second phase began when the decision was made to prepare an Environmental Impact Statment. The Interdisciplinary Team (IDT) has sought involvment of agencies, individuals, and interest groups outside the Forest Service during both phases of planning.

ENVIRONMENTAL ASSESSMENT

The following information summarizes the Consultation with Others section of the EA.

PUBLIC INVOLVEMENT PLAN

The study plan prepared for the timber sale planning process, approved May 25, 1979, included a public involvement plan and activities schedule. The plan was prepared to comply with legislation and policy direction which requires public involvement in the planning process.

The IDT recognized that due to time constraints for completion of the study, early public contacts would be required in order to incorporate vital information into the planning process.

Several public involvement meetings were held in Juneau, to inform the public of the proposed timber sale activity in Gilbert Valley, and to receive their reaction to the proposal. Major issues and concerns identified by the public were documented and are on file in the USDA Forest Service office in Sitka.

CONSULTATION WITH OTHER AGENCIES

Since the early phases of the study, consultation with the Alaska State Historical Preservation Officer, the Alaska Department of Fish and Game, the National Marine Fisheries, and the U.S. Fish and Wildlife Service has occurred.

The IDT requested confirmation of field survey data. USDA Forest Service resource specialist maintained contact with their counterparts in other agencies. Documentation and records are on file.

PUBLIC INVOLVEMENT (PI)
PLANNING PROCESS
GILBERT BAY STUDY

DATE	ACTION	PUBLIC INVOLVEMENT
3/5/79	News Release, Sitka Sentinel	Forest Supervisor announcement of Gilbert Bay timber sale proposal.
3/14/79	News Release, SE Alaska Empire	ditto
4/13/79	News Release, SE Alaska Empire	Forest Supervisor's announcement of Port Snettisham Management plans including Gilbert Bay timber sale activities.
5/29/79	News Release, SE Alaska Empire	Announced information gathering meeting and comments request on Gilbert Bay proposal.
5/30/79	Public Involvement (PI) meeting, Juneau	
6/7/79	PI meeting, Juneau	This was an unscheduled meeting held at the request of Dr. Cliff Lobaugh, Juneau.
7/20/79	News Release, SE Alaska Empire	Announced draft EA available for review and comments. Mail copies to individuals and organizations on mailing list.
7/31/79	PI meeting, Juneau	To present working draft IDT assessment of proposal; receive comments on alternatives.
8/14/79	PI meeting, Juneau	To meet with Juneau City and Borough Planners at public meeting and present proposal.
10/31/79		Final Environmental Assessment to Regional Forester for decision.

CONSULTATION WITH SPECIAL INTEREST GROUPS AND ORGANIZATIONS

Special interest groups and organizations were provided with planning information and invited to participate. Meeting notes are documented in the USDA Forest Service files.

A mailing list is also maintained and on file.

PLANNING RESPONSE TO PUBLIC COMMENT

The IDT recognized the importance of public comment in assessing the issues and concerns regarding the proposals.

All formal responses received by the public were studied and included in the EA where feasible.

Copies of newspaper announcements, public involvement meeting minutes and notices, and public responses to the proposal were included in the EA, copies of which are on file in the Sitka office of the Forest Service.

ENVIRONMENTAL IMPACT STATEMENT

The following information summarizes public involvement in the preparation of the Final Environmental Impact Statement (FEIS) for Recreation Development and Timber Sale Proposal in Gilbert Bay/Holkham Bay area.

PUBLIC INVOLVEMENT PLAN

The study plan for this project includes a public involvement plan and activity schedule. This plan was prepared to assure public involvement in the land management planning process and to meet specific informational needs of this proposal. In compliance with this plan, a "Notice of Intent to prepare an Environmental Impact Statement" was developed and published in local Juneau and Sitka newspapers in January, 1980.

A mailing list of interested participants was initiated and maintained throughout the study process.

All inputs from public and other agencies and/or organizations have been processed and documented.

Adjusted schedule for public involvement:

January 14, 15, 16, 21, 22, 23, 24, 1980 -

1/11/80	Overview paper with invitation t participate in scoping session t interested publics identified in the environmental assessment process.
1/24/80	Scoping session in Juneau at the Mendenhall Glacier Visitor Cente 7-10 p.m.
1/31/80	Response due date for public comment on scoping session (Appendix L).
4/1/80	Publish advertisement announcing DEIS available for review and comments. Mail copies to individuals and organizations on mailing list.
5/15-6/7/80	IDT incorporate public response into the Final Environmental Impa Statement.
7/1/80	Final Environmental Impact Statement sent to public.

Due to the compressed time schedule for preparation of the DEIS, it was necessary to immediately announce a public scoping sessio and prepare an information package which was delivered to all publics who had expressed interest during the EA process. The informati packet containing: 1) a Notice of Intent t prepare an Environmental Impact Statement; 2 the draft IDT study plan; 3) a record of eve affecting timber and recreational developmen planning; 4) December 6, 1979, and January 1 1980, Memoranda identifying objectives and schedule for process, and 5) Environmental Assessment for the Proposed Independent Timbe Sale in Gilbert Bay, October 1979, was sent the following people:

Stephan C. Volker - Sierra Club, Legal Defens
Fund, Juneau, Alaska
Richard D. Reed, Regional Habitat Protection
Supervisor - ADF&G, Juneau, Alaska
Waine Oien, Field Supervisor - U.S. Fish &
Wildlife Service, Juneau, Alaska
Art Hartenberger, Planning Director - City a
Borough of Juneau, Alaska
Phil Holdsworth
Juneau, Alaska
Lee McAnerney, Commissioner, State of Alaska
Community & Regional Affairs, Juneau, Al
Harry L. Rietze, Director, Alaska Region -
National Marine Fisheries Service, Junea

ena J. Henkins, Regional Environmental Supv. - Alaska Dept. of Environmental Conservation, Juneau, Alaska
e Henkins Douglas, Alaska
old Buzzalini - MAPCO Tulsa, Oklahoma
n Graham - Placid Oil Co. Anchorage, Alaska
en D. Shattuck Juneau, Alaska
Winegar, City manager Juneau - Alaska
on Bruce - United Southeast Alaska Gillnetters Juneau, Alaska
. Dixie M. Baade, S.E. Vice President - Fed. of Western Outdoor Clubs, Petersburg, Alaska
Whitmore - Alaska Dept. of Environmental Conservation, Juneau, Alaska
y Schuler - National Audubon Society, Juneau, Alaska
eau Memorial Library, Juneau, Alaska
ek Poon - Northern Southeast Aquaculture Association, Sitka, Alaska
Gray, Exec. Director - United Fishermen of Alaska, Juneau, Alaska
mie Rosenbruch - Glacier Guides, Inc., Gustavus, Alaska
Boddy - Territorial Sportsmen, Juneau, Alaska
ska Wildlife Federation, Juneau, Alaska
er Huberth, General Manager, Forest Products Division Sealaska Corporation, Juneau, Alaska
Wilson, President and Chairman - Goldbelt, Inc., Juneau, Alaska
ff Lobaugh, President - Sierra Club, Juneau Chapter, Juneau, Alaska
nard Steinberg, Acting Exec. Director - Southeast Alaska Cons. Council, Juneau, Alaska
hard Folta - Lynn Canal Conservation Society, Haines, Alaska
y Ellen Cuthbertson, Alaska Wilderness Coordinator - Sierra Club, Juneau, Alaska
l Peyton - SEACC Representative, Sitka, Alaska
ry Edwards - Sitka Conservation Society, Sitka, Alaska

erest groups and key interested agencies e contacted personally or by telephone to courage attendance at the scoping session and provide written response. Copies of public ouncements, news articles, mailing lists, information package containing the Notice Intent, IDT Study Plan, record of events, memoranda identifying objectives and edule are on file in the Forest Service ice in Sitka, Alaska.

The scoping session, held at the Mendenhall Glacier Visitor Center on January 24, 1980, served to validate the issues identified in the Notice of Intent. Additional concerns were identified at this session and included in the evaluation process.

In general, no one at the session expressed support for the timber sale or development of commercial recreation facilities in the Gilbert Bay/Holkham Bay area. Opinion was divided regarding in which bay the log transfer facility and camp should be located "if there must be a timber sale." Support was expressed for development of primitive recreational facilities such as campsites or cabins.

CONSULTATION WITH OTHER AGENCIES

In the development of the FEIS, the following agencies and individuals have been contacted:

Alaska Dept. of Fish and Game
    Richard D. Reed - Habitat Division
    Dave Zimmerman - Game Division
    Nate Johnson - F.R.E.D. Division
    Loyal Johnson - Game Division

Alaska Dept. of Community and Regional Affairs
    Lee McAnerney, Commissioner

Alaska Dept. of Environmental Conservation
    Deena J. Henkins
    Jan Whitmore

Alaska State Clearinghouse
    State-Federal Coordinator
    Cindy Zilleg

National Marine Fisheries Service
    Andrew R. Gifford
    Keeneth R. Creamer
    K. Koski
    Harry L. Rietz
    Ed Murrell

U.S. Fish and Wildlife Service
    Jack Hodges
    Waine Oien
    Donald Montgomery
    Bill Hughes

U.S. Bureau of Mines
    John Mulligan

City and Borough of Juneau
    William D. Overstreet - Mayor
    Mar Winegar - City Manager
    Arthur Hartenberger - Director Planning

In compliance with 36 CFR 800.4, the Chatham Area archeologist consulted with the State Historical Preservation Officer to determine whether cultural resources are within the study area. (Appendix Q)

The IDT has consulted and confirmed information with other agencies throughout the planning process.

CONSULTATION WITH SPECIAL INTEREST GROUPS AND ORGANIZATIONS

Special interest groups have been provided with planning information and invited to participate. The following groups have been contacted:

Conservation Groups

- SEACC
- Sierra Club - Juneau Chapter
- Sitka Conservation Society
- Lynn Canal Conservation Society
- Alaska Wildlife Federation
- Territorial Sportsmen
- National Audubon Society
- Federation of Western Outdoor Clubs
- Sierra Club Legal Defense Fund

Resource Groups

- United Southeast Gillnetters
- Northern Southeast Aquaculture Association
- United Fishermen of Alaska
- League of Women Voters
- Chamber of Commerce
- Goldbelt Inc.
- Sealaska Corporation
- Alaska Logger's Association

Guides

- Vic Lane
- Alaska Discovery Inc.
- Glacier Guides Inc.
- Carl Lane

Mining

- MAPCO
- Placid Oil

PUBLIC REVIEW OF DRAFT ENVIRONMENTAL STATEMENT

Copies of the DEIS were mailed to interested individuals, special interest groups, organizations, Native groups, City and Borough of Juneau, and State and Federal agencies. The document included a response form and an accompanying letter from the Chatham Area Forest Supervisor urging written response by June 1, 1980. News articles in regional papers also announced release of the DEIS. Copies of the document were distributed to the Sitka and Juneau offices of the Forest Service so that individuals not on the distribution mailing list could obtain copies for review.

Review of the DEIS by the State of Alaska and interested Federal agencies was accomplished through the process established by the Office of Management and Budget A-95 circular.

Responses to the DEIS received from individuals, special interest groups, organizations, the State of Alaska, and Federal agencies, with Forest Service comments, are provided in Appendix L.

PLANNING RESPONSE TO PUBLIC COMMENT

The public involvement process has been successful in identifying a great many of the publics interested in this plan and has provided the IDT with considerable information. Development of this document includes response to comments received and considered in the EA and Draft EIS. Public response has been considered in development of the Recommended Action proposed in the FEIS. The Recommended Action attempts to address many of the expressed concerns and is expected to satisfy a number of management recommendations presented to the IDT by the public.

X. Glossary

VERSE

The uphill grade or slope that a logging truck has to negotiate in order to deliver logs to the log transfer facility. A grade of 10% or greater is considered adverse.

LOCATION

Commitment of a given area of land to one or more kinds of management, to provide the public with differing land use opportunities.

Allocation constraints limit the consideration of a given land to less than the full set of land management options that are basically suitable for application thereon.

LUVIAL

Deep, highly productive soils in valley bottoms, resulting from transportation and deposition from higher slopes by running water.

PINE

(See Landtype)

ADROMOUS FISH

Those species of fish which mature in the sea, and migrate into streams to spawn. Salmon, Steelhead and shad are examples.

CHAEOLOGY

The scientific study of material remains (relics, artifacts, monuments), of past human life and activities; the remains of the culture of a people.

TIFACTS

Object such as a tool or ornament showing human workmanship or modification.

NTHIC

Relating to, or occurring in the organisms dwelling at the bottom of a body of water.

RROW SITE

The place from which material is taken for road fill, camp pads, log transfer site fills, etc. Borrow sites may be comprised of alluvial materials or may be excavated from shot rock.

cfs/cfm

Cubic feet per second/cubic feet per second per mile. Terminology used in determining and measuring streamflow velocities.

CLEARCUT

A method of regeneration cutting in which the old crop is cut over a considerable area at one time. Regeneration in the Alaska Region is usually natural; and the size of clearcut areas rarely exceeds 100 acres.

CLIMAX FOREST

A forest in which the species and condition of the stand remain fairly stable. This is the culminating stage of succession and should remain stable as long as the environment remains unchanged.

COMMERCIAL FISHERY

The taking, fishing for, or possession of fish, shellfish, or other fishery resources for profitable purposes.

CRUISE

A statistical sample made in a stand of timber to determine total volume and quality.

CULTURE

The integrated pattern of human behavior that includes thought, speech, action and artifacts and depends upon mans' capacity for learning and transmitting knowledge to succeeding generations. The customary beliefs, social forms and material traits of a racial, religious or social group.

DISPERSED RECREATION

Recreation of various kinds that occur generally throughout a large area and is not confined to a specific place. Further categories of Dispersed Primitive Recreation and Dispersed Semi-primitive Recreation deal with specific site types.

DUFF

A layer of loose, partly decomposed vegetative matter on a forest floor.

ENVIRONMENTAL IMPACT STATEMENT

A statement of environmental effects required for a major Federal Action under Section 102 of the National Environmental Policy Act (NEPA), and released to the public and other agencies for comment and review, prior to a management decision.

ESCAPEMENT

The number of adult fish returning to their spawning stream.

ESTUARINE HABITAT MANAGEMENT UNIT (EHMU)

The area around an estuary and closely associated with the estuarine ecosystem, having major fish or wildlife values.

ESTUARY

All or part of the mouth of a river or stream having unimpaired natural connection with open saltwater and within which the seawater is measurably diluted with freshwater. Estuaries include the adjacent grass or mud flats present below mean-higher high tide.

FISH HABITAT

The aquatic environment and the immediately surrounding terrestrial environment that, combined, afford the necessary physical and biological support systems required by fish species during various life history stages.

FOREST LAND CLASSES

Deferred - productive forest lands witdrawn from cutting until further classification has been determined, i.e., areas of potential resource protection.

Reserved - productive forest lands withdrawn from cutting by statute, administrative regulation, or by designation into land use approved by the Regional Forester.

Unregulated - areas that are not organized for timber production, and are potential allocations to numerous other management activities.

Non-Forest Lands - land with less than 10 percent cover of commercial tree species.

Non-Commercial Forest Lands - land with more than 10 percent cover of commercial tree species but not qualifying as Commercial Forest Land.

Commercial Forest Land - is producing or i capable of producing crops of industrial wood. This includes areas suitable for management and capable of producing in excess of 20 cubic feet per acre of annual growth. All Commercial Forest lands are subdivided into the following components:

a. Standard - the component of the commercial forest land on which timbe can be logged with adequate protectio of all forest resources under the usual provisions of a timber sale contract.

b. Special - the component of the commercial forest land recognized as needing specially designed treatment of the timber resource to achieve landscape or other key resource objectives.

c. Marginal - the component of the commercial forest requiring excessive development costs, having low product values or having resource protection constraints making the stand inoperable.

FOX TRAP HOUSE

A small plank cabin used to trap fox which has bait, a one way door, and water to sustain trapped animals for a small number of days.

FRY

Recently hatched fish.

HIGH LEAD CABLE LOGGING

A method of transporting logs from the stumps to a collecting point by using a powered cable, passing through a block fastened high off the ground to a tower or spar to lift the front ends clear while dragging them.

INOPERABLE TIMBER

Timber which cannot be harvested because of potential resource damages, economic

INTERDISCIPLINARY TEAM (IDT)

A group of individuals with different training backgrounds assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad enough to adequately solve a problem. The Core IDT is the control planning subunit within the IDT.

INVENTORY VALUE

Volume of commercial timber actually on the ground, usually presented as board feet or cubic feet per acre.

LAND FORM

Land form is used for surface features whose origins can be attributed to particular geological processes or particular structures.

LANDSCAPE CHARACTER TYPES

See Visual Character Types

LANDSCAPE VARIETY CLASSES

Reflect natural scenic qualities. Distinctive landscape variety ratings are generally applied to those areas with outstanding or unusual visual quality. Conversely, landscapes with little diversity in landform, vegetative patterns, waterforms, or rock formations are given lower variety class ratings.

LANDTYPE

Visually identifiable unit areas of similar land form and climatic processes having defined patterns of soils and vegetative potentials. They can range in size from about 1/10 to 1 square mile. Among character types within which specific landtypes occur are:

Alpine - the higher regions of mountain systems, strictly defined as the regions between timber lines and permanent snow lines.

Muskeg - a marshy area similar to a bog with insufficient drainage and a considerable depth of moss or sedge.

Valley Bottoms and Lowlands - relatively flat land or rolling foothills at lower elevations, including valley side slopes less than 40 percent.

Valley Walls - continuous sideslopes generally exceeding 40 percent.

V-Notches - narrow, steep-sided ravines or valley watersheds with V-shaped cross sections whose bottom usually contains a watercourse often recognized as a sign of geological weakness or post-glacial channeling.

Wetlands - the areas lying between the elevation of extreme low spring tides and the tree line.

LAND USE DESIGNATIONS (LUD)

Land use designations are a method of classifying or zoning lands according to a combination of various uses and use intensities . Uses or activities are grouped together so they define together with a set of coordinating policies, a combination of activities which are essentially compatible.

LUD I - all areas allocated to LUD I will be either recommended for wilderness designation or will be studied for such designation. LUD I is usually applied to undeveloped lands which provide opportunities for solitude and primitive types of recreation and contain unaltered habitats for plant and animal species. If an area allocated to LUD I is added to the National Wilderness Preservation System by Congress, certain management implications would apply.

LUD II - this designation provides greater management flexibility than LUD I while still retaining the primitive wildland environment. Primitive recreational facilities can be built, and habitat improvements for fish and wildlife are also permitted.

LUD III - LUD III areas are managed to provide a combination of both amenity and commodity values. The goal is to achieve compatibility among competing resource uses within the same area.

LUD IV - in LUD IV, the goal is to provide opportunities for intensive development of resources. Emphasis is primarily on commodity, or market resources and their use. Amenity values are also provided for. When conflicts over competing resource uses arise, however, these conflicts would most often be resolved in favor of the commodity values than would be the case in LUD III.

LEACHATES

Matter removed from a substance by percolating.

LINE OFFICER

Chief, Regional Forester, Forest Supervisor, or District Ranger

LOG TRANSFER FACILITY (LTF)

Location at which logs are transferred from land to water in preparation for making rafts for storage or towing to the mill, i.e., log dumps. This also applies to sites for barge loading.

MANAGEMENT ACTIVITY

An action taking place on-the-ground as a result of management decision. Examples are clearing debris, timber harvests, planting trees, and fish ladder construction.

MANAGEMENT AREA

Subunits of forest administrative areas are called specific management areas. Management areas are made up of the smaller Value Comparison Units (VCU's) which have similar Land Use Designation (LUD), resource, and physical allocations, and where specific activities will all be included in the same prescriptive management plan.

MANAGEMENT OBJECTIVE

The policy setting the kind of management to be done on a Management Area.

MANAGEMENT PRESCRIPTIONS

Specifically sets forth policies and standards under which Management Objectives will be carried out. Commonly consists of a comprehensive statement in words, maps, illustrations and other media explaining the means in which objectives can be

MARGINAL

See Forest Land Classes.

MAXIMUM MODIFICATION

See Visual Quality Objectives

MEAN ANNUAL INCREMENT

The total volume of a tree or stand divided by the age, with volume expressed in cubic feet or board feet per year.

Mbf

One thousand board feet.

MIDDEN

Refuge heap consisting of highly organic soil, shells, bones and perhaps artifacts.

MMbf

One million board feet.

MODIFICATION

See Visual Quality Objectives.

MULTIPLE ENTRY

Entering an area more than once during a given rotation period for the purpose of harvesting timber.

NATIVE CAMP

Area where temporary shelters were erected for short periods of time, but may be used again and again from one year to the next.

NATIVE VILLAGE

A settlement consisting of several structures occupied either on a permanent or seasonal basis.

NON-POINT SOURCE POLLUTION

Pollution whose source is general rather than specific in location. Logging ooerations, production of sediments, and automobile exhausts are examples of this form of pollution.

NON-STANDARD HARVEST OPERABILITY

would require other systems including balloon or helicopter and skyline over 2600 feet.

NORMAL HARVEST OPERABILITY

Timber which can be harvested with standard equipment and predominant techniques not in use. These include highlead, A-frame, skyline less than 2600 feet, and tractor.

OLD-GROWTH SAWTIMBER

CFL stands more than 10 percent stocked where the plurality of stocking is in sawtimber trees (9 inches diameter breast high or larger) more than 150 years old.

OPERABILITY

Timber suitable for harvest with the capability of being harvested and transported to a market. See Inoperable, Non-standard, and Normal Harvest Operability.

PARTIAL CUTTING

All methods of tree removal which result in taking only part of a stand.

PARTIAL RETENTION

See Visual Quality Objectives.

PETROGLYPH

Carving or inscription carved or pecked on rocks, boulders or bedrock outcrops.

PITCH CUT TREES

Hemlock or spruce trees which have been extensively blazed presumably to cause oozing of pitch used as fire starters, basket waterproofing, boat caulking, or medicine.

POTENTIAL YIELD

The potential yield for the next ten years is the maximum harvest that could be planned to achieve the optimum perpetual sustained-yield harvesting level attainable with intensive forestry on regulated areas considering the productivity of the land, conventional logging technology, standard cultural treatments, and interrelationships with other resource uses and the environment.

PRESCRIPTION

See Management Prescription.

PRESERVATION

See Visual Quality Objectives.

PRODUCTIVE

See Soils.

RARE II

(Roadless Area Review and Evaluation). Environmental survey of roadless areas as a means of gaining alternative approaches for deciding use of undeveloped areas.

RETENTION

See Visual Quality Objectives

RETENTION FACTOR

The amount of commercial forest land removed from timber base to protect other resource values. These factors are allowances available to draw upon when meeting other resource needs and are not fixed policies.

ROTATION

The planned number of years (approximately 100 years in Alaska) between the formation of regeneration of a stand and its final cutting at a specific stage of maturity.

SALMONIDS

All members of the family Salmonidae, including salmon, trout, and char.

SAWTIMBER

Trees considered suitable in size (9 inches diameter breast high and larger) and quality for producing sawn timber.

SCALE VOLUME

The volume of timber, reported in board feet or cubic feet, as measured by a mensuration formula.

SCENIC QUALITY

The aesthetic value associated with the visual characteristics of the landscape.

SCOPING

An early and open public information gathering process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

SILVICULTURE

Generally, the science and art of cultivating (i.e., growing and tending) forest crops. More particularly, it is the theory and practice of controlling the establishment, composition, constitution and growth of forests.

SITE (Archaeological)

Any location where human behavior has resulted in the deposition of at least two different artifacts in close proximity, or other evidence of purposive behavior.

SITE INDEX

This is the ability of a site to produce wood. It is usually expressed as average tree height at a given age. Age 100 is usually used on the Tongass. Soil ecosystem F-1 has a site index of ±150.

SLASH

Debris left over a logging operation, i.e., limbs, bark, broken pieces of logs.

SOILS

Soils have been evaluated and classified into categories in relationship to their inherent qualities and defects and suitability for development activities.

Critical - a soil type whose physical properties cause it to be inherently unstable.

Hazard - soil on excessively steep slopes (usually 37 degrees or more) subject to sliding; or soil in sharp V-notches.

Non-Productive - poorly drained soils represented by muskeg and scrub combinations.

Productive - soil sufficiently deep and well-drained to produce significant growth rates in vegetation. In southeast Alaska, this soils is capable of producing timber growth rates of 20 cubic feet or more annually.

SPAWNING AREA

The available area within the confines of a stream course which is suitable for the deposition and incubation of salmon or trout eggs.

SPECIAL

See Forest Land Classes.

SPECIAL USE PERMIT

A permit that authorizes the premittee to engage in specified activities or erect specified structures at designated locations on the National Forest.

STANDARD

See Forest Land Classes.

STUDY AREA

An area of land that has been designated for an evaluation of its resources, productive capability, and existing or potential uses.

STUMPAGE

The value of timber as it stands in terms of an amount per board foot.

SUITABILITY

An evaluation based upon a resource's potential utilization within proposed management activities.

THOUSAND-FOOT BOARD MEASURE

A method of timber measurement in which the unit is equivalent of 1,000 square feet of lumber one inch thick. It can be abbreviated as Mbd, ft., Mbm, or Mbf.

TONGASS LAND MANAGEMENT PLAN (TLMP)

The land allocation plan for the Tongass National Forest which serves to direct and coordinate further planning on the Forest as well as the uses and activities carried on within the Forest on a day-to-day basis. TLMP provides management direction for a period of ten years.

UNACCEPTABLE MODIFICATION

See Visual Quality Objectives.

UNDERSTORY

The small trees and other woody species growing under a more or less continuous cover of branches and foilage formed collectively by the upper portions of adjacent trees and other woody growth (overstory).

UNREGULATED

See Forest Land Classes.

VALLEY BOTTOMS AND LOWLANDS

See Landtypes.

VALLEY WALLS

See Landtypes

VALUE COMPARISON UNIT (VCU)

A distinct geographic area that generally encompasses a drainage basin containing one or more large stream systems. Boundaries usually follow easily recognizable watershed divides. These units were established to provide a common set of areas for which resource inventories could be conducted and resource value interpretations made.

VIEWER SENSITIVITY LEVELS

Are determined for land areas viewed by those who are traveling through the forest by air, waterways, roads and trails; are using facilities such as campgrounds, visitor center, public cabins, picnic grounds, winter sports areas, and resorts; or are otherwise concentrating use and recreation at lakes, streams, and other water bodies. High sensitivity levels are associated with areas of national importance and high public use, e.g., ferry routes, tour ship routes, high volume recreational waterways, anchorages, camping areas, and permanent communities. Lower sensitivity levels are identified with areas lacking national prominence or receiving limited use by recreationists.

VISITOR DAY

The visitation provided by one or more persons for a period of 12 to 24 hours, either continuous or spread over several visits.

VISUAL CHARACTER TYPES

An area of land that has common distinguishing visual characteristics of landform, water forms, and vegetation patterns. Used as a frame of reference to rate physical features of an area as to their degree of scenic quality.

VISUAL MANAGEMENT SYSTEM

A system which categorizes scenic quality (landscape variety classes) and public concern for scenic quality (viewer sensitivity levels) to determine a set of measurable goals for management of the visual resource. These goals are termed Visual Quality Objectives (VQO). Inventoried Visual Quality Objectives describe different degrees of acceptable alteration of the landscape before trade-offs with other resources are involved. Adopted VQO's are the final Visual Quality Objectives describing the visual resource goals for a particular land management alternative. The Adopted VQO's associated with a selected land management plan are a "contract" between the land manager and the public until the plan is next amended or revised (see Visual Quality Objectives).

VISUAL QUALITY OBJECTIVES

Visual Quality Objectives consist of the following classifications:

Preservation - management activities, except for low visual-impact recreation facilities, are prohibited. Allows only ecological changes.

Retention - Management activities are not visually evident.

Partial Retention - management activities can be visible but must be visually subordinate to the characteristic natural landscape.

Modification - management activities may visually dominate original landscape characteristics. However, visual characteristics of management activity must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding character type.

Maximum Modification - management activities may dominate the natural landscape. When viewed from foregound or middleground viewing positions, they may not appear to completely borrow from naturally established form, line, color, or texture in the landscape. But, when viewed from background positions (greater than three miles), the activity must have the visual characteristics of the natural landscape. All foreground and middleground alterations must be designed to reduce undue contrast within five years.

Unacceptable Modification - management activities which do not meet as a minimum, a Maximum Modification Visual Quality Objective. Overall extent of management activity is excessive. Size of activity is poorly related to the scale of landform and vegetative patterns in the characteristic landscape. These activities should not be permitted regardless of viewing distance zones.

-NOTCH

See Landtypes.

OLUME CLASS

Average stand volume usually given as net board feet per acre, Scribner Rule, on the Tongass.

ETLAND

See Landtypes

HIP REMOVAL

The removal of all trees left standing after logging to prevent the spread of dwarf mistletoe.

ILDERNESS

Any large tract of land uncultivated and uninhabited by human beings, where the earth and its biotic community is untrampeled by humans, where humans are the visitors who do not remain.

WILDLIFE CORRIDOR

A natural route offering relative ease o travel for terrestrial animals as dicta by land forms, water, and/or vegetation often descending a ridge or paralleling river.

WILDLIFE HABITAT

The locality where the species may generally be found and where all essenti for its development and existence are present.

WILDLIFE HABITAT MANAGEMENT UNIT (WHMU)

An area of wildlife habitat identified during the IDT process as having wildli values of such importance that the habi within the management area designated b the IDT is managed with wildlife as the primary resource value.

WINDTHROWS

Areas or particular trees uprooted by wi velocity.

APPENDIX A

INTERDISCIPLINARY TEAM MEMBERSHIP

The Interdisciplinary Team responsible for the preparation of this Environmental Impact Statement is as follows:

Team Members

Tom Walker, Forester (Team Leader)
B.S. Forest Management, 7 years experience

Don Fisher, Landscape Architect
B.L.A. Landscape Architecture, 8 years experience.

Larry Tripp, Soil Scientist
M.S. Soil Science, 2 years experience

Ken Mitchell, Forester
B.S. Forestry, 17 years experience

Virgil Henke, Wildlife Biologist
B.S. Wildlife Biology, 10 years experience

Jack Buchheim, Engineer
B.S. Agricultural Engineering, 19 years experience

Ben Mitchell, Civil Engineer
B.S. Civil Engineering, 21 years experience

Support Team

Bob Vaught, Fisheries Biologist
B.S. Fisheries Biology, 3 years experience

Stan Davis, Archeologist
M.A. Archeology, 8 years experience

Roger Walkenhorst, Archeologist
B.A. Archeology, 3 years experience

Jane Donnelly, Writer-Editor
3 years college with English major, 3 months experience

Tom Somrak, Forester
B.S. Forestry, 5 years experience

Tom Meyer, Economist
Phd. Economics, 10 years experience

John Stednick, Hydrologist
Phd. Forest Hydrology, 4 years experience

Don Breitinger, Lands Forester
B.S. Forestry, 8 years experience

Ken Thompson, Fisheries Biologist
B.S. Fish and Wildlife Management, 15 years experience

Support Team (non-Forest Service)

Bill Hughes, Biologist, U.S. Fish and Wildlife Service
M.S. Oceanography, 10 years experience

Ed Murrell, Fisheries Biologist, National Marine Fisheries Service
M.S. Fisheries, 3 years experience

APPENDIX B

RESOLUTION OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 423 (Sponsor Substitute)
Introduced June 2, 1977

A RESOLUTION REQUESTING THE TRACY ARM/ENDICOTT ARM AREA BE DESIGNATED A NATIONAL RECREATION AREA

WHEREAS, Tracy Arm/Endicott Arm area in southeast Alaska is unusually rich in natural scenic beauty, and

WHEREAS, by virtue of its proximity to the City and Borough of Juneau, Tracy Arm and Endicott Arm are readily accessible to the citizens of Alaska and to citizens and visitors from other states and countries, and

WHEREAS, said area should be preserved for the present and future generations, and

WHEREAS, every effort should be made to encourage citizens and visitors to view and experience the beauty of the natural wonders of the area, and

WHEREAS, a proposal exists to classify Tracy Arm/Endicott Arm as a wilderness area, and

WHEREAS, designation as a wilderness area for the upper reaches of Tracy Arm and Endicott Arm east of the batholith and a National Recreation Area for the balance of this area would accomplish the dual goals of preserving the natural environment and beauty of the area and maximizing the opportunities for citizens and visitors to see and appreciate the magnificent area;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

1. That the total Tracy Arm/Endicott Arm area should not be designated as a wilderness area.

2. That the appropriate governmental agencies are strongly urged to take all steps necessary to establish the upper reaches of Tracy Arm/Endicott Arm as a wilderness core area in conjunction with a National Recreation Area where hunting, fishing and access rights are continued.

3. That the appropriate governmental agency be urged to appropriate special funds for facility development, including overnight accommodations, as well as support developments required by boaters.

4. That copies of this resolution be sent to the members of the Alaska congressional delegation, the Secretaries of Agriculture and Interior, the United States Forest Service, the United States Park Service, the Governor of the State of Alaska, and the Commissioner of Natural Resources of the State of Alaska.

APPENDIX C

TLMP DIRECTION FOR MANAGEMENT

The following data was originally displayed in part two of the "Tongass Land Management Plan" (TLMP) published in March, 1979, by the USDA Forest Service in Alaska. "LUD" refers to one of four land use designations defined in the plan. "VCU" refers to value comparison unit, which generally corresponds to an area of the Tongass National Forest that has a common drainage system. The proposed Gilbert Bay independent timber sale is located in VCU 57. The proposed recreation facilities are located in VCU's 57 and 64. Plan Period 1 is for 1981-86 and Period 2 is for 1986-91. "PAOT" means persons at one time.

Management Area Number
C10
Management Area Name
Port Snettisham

VCU's - 50 51 52 53 54 55 56 57 58 61
LUD's - 3, 4

	NFS Acres	CFL Acres
Operable CFL	-	22,854
High Visual Sensitivity	10,316	9,915
Medium Visual Sensitivity	14,172	14,115
Beach Fringe Through 500 feet	4,760	3,420
Special/Unique Areas	0	0

MANAGEMENT DIRECTION/EMPHASIS

The major activity emphasis will be timber harvest and fish hatchery construction. An independent timber sale is being planned in Gilbert Bay. Other sales are possible. ADF&G plans to build a salmon hatchery near the Snettisham power plant in 1979-80. Active exploration for mineral deposits is occurring in VCU 57. The Whiting River and Sweetheart Lakes areas provide possible trail and cabin sites. VCU 53 has the Limestone Inlet research natural area which will be continued. Plans are needed for saltwater related recreation management such as anchorages, campsites, cabins and trails. Interpretation opportunity exists at the site of Alaska's first pulp mill, the remains of which are here.

MANAGEMENT ACTIVITIES

ACTIVITY	UNITS OF Measure	VCU	--PLAN PERIOD--			REMARKS
			1	2	FUTURE	
RECREATION OR VIS CONSTRUCTION	PAOT	61.0		Y		WHITING R. CABIN
HABITAT IMPROVEMENT - FISH	ACRE EQV.	50.0	Y			ADF&G FISH HATCHERY, SNETTISHAM CAMPSITE CONSTRUCTION
MINING LAW, COMPLIANCE AND ADMINISTRATION	CLAIMS	57.0	Y	Y		WGM, INCORPORATED
TRAIL CONSTRUCTION LK.	MILES	57.0	Y	Y		WHITING R.-SWEETHEART
TRAIL CONSTRUCTION LK.	MILES	61.0	Y	Y		WHITING R.-SWEETHEART
TIMBER SALE PROJECT	--	51.0	Y	Y		INDEPENDENT TIMBER SALE
TIMBER SALE PROJECT	--	52.0	Y	Y		INDEPENDENT TIMBER SALE
TIMBER SALE PROJECT	--	53.0	Y	Y		INDEPENDENT TIMBER SALE
TIMBER SALE PROJECT	--	54.0	Y	Y		INDEPENDENT TIMBER SALE
TIMBER SALE PROJECT	--	55.0	Y	Y		INDEPENDENT TIMBER SALE
TIMBER SALE PROJECT	--	57.0	Y	Y		GILBERT BAY
TIMBER SALE PROJECT	--	61.0	Y	Y		WHITING RIVER

MANAGEMENT AREA C12

MANAGEMENT AREA NAME HOLKHAM BAY

VCU's 64.0 66.0

LUD's 2

	NFS ACRES	CFL ACRES
Operable CFL	--	9,159
High Visual Sensitivity	0	0
Medium Visual Sensitivity	123	123
Beach Fringe Through 500 feet	535	468
Special/Unique Area	0	0
Bald Eagle Nesting Areas	1,026	769
Total Acres	23,445	11,612

MANAGEMENT DIRECTION/EMPHASIS

Major activity emphasis will be toward developed recreation and destination sites for use by visitors to the nearby proposed Tracy Arm-Fords Terror Wilderness. The establishment of a marina and recreation use site is currently being studied as an entry point for the proposed Tracy Arm-Fords Terror Wilderness. Examination of the cultural/historical value of the fox farm site at the entrance to Holkham Bay is needed.

MANAGEMENT ACTIVITIES

ACTIVITY	UNITS OF Measure	VCU	--PLAN PERIOD--			REMARKS
			1	2	FUTURE	
RECREATION OR VIS CONSTRUCTION	PAOT	64.0		Y		MARINA AND RECREATION/ VIS
RECREATION OR VIS CONSTRUCTION	PAOT	66.0		Y		MARINA AND RECREATION/ VIS CONSTRUCTION

APPENDIX D

ADF&G CATALOGUED FISH STREAMS AND ASSOCIATED SPECIES

1) Areas Not Included in the Gilbert Bay Timber Sale.

Whiting River (111-35-05) and three streams on the western side of the bay (111-35-15, 17, 18) are not included in the sale area. The three streams rise abruptly from mean high water (MHW) and do not contain much spawning habitat (including intertidal). The Whiting River is significant in that it is the only system entering Gilbert Bay in which King salmon run. It is a large river of glacial origin utilized by King, Sockeye, Coho, Pink and Chum salmon, Dolly Varden char, and Cutthroat trout.

2) Sweetheart Creek (111-35-20)

Sweetheart Creek serves as a drainage for Upper and Lower Sweetheart Lakes. A major (40 feet) waterfall, 50 feet from MHW, prevents migration upstream. However, the available spawning habitat is excellent and supports a major Pink and Chum run during the even years and poor ones during the odd years. Limited escapement records have indicated up to 20,000 pink and 12,000 chum salmon at a given time.

3) Unnamed Creek (111-35-30)

This is a small creek which rises soon after MHW. Spawning habitat is fair to poor and supports only small Pink and Chum populations, primarily from the intertidal spawning area.

4) Gilbert Creek (111-35-32)

Gilbert Creek is a large, meandering stream which empties into an extensive tidal flat. Beaver activity is prevalent along the stream course, creating braided channels and extensive pond systems. These ponds support substantial Cutthroat trout and Dolly Varden char populations. They also provide important rearing habitat for Coho and Sockeye salmon. The intertidal and flowing portions of the stream provide spawning habitat for Pink and Chum salmon. Very limited escapement data indicates spawning populations of 300-500 Sockeye and 500 Pink salmon.

5) Unnamed Creek (111-35-34)

This is a moderate-sized creek with a significant amount of beaver activity supporting Cutthroat trout and Dolly Varden char. After cascading down a steep incline, the stream meanders for approximately two miles before terminating at a large tidal flat. The spawning habitat is good for Pink, Chum, and Coho salmon. Beaver ponds provide rearing habitat for Coho salmon. Escapement data is lacking but significant numbers of Coho fry were observed in the streams.

6) Unnamed Creek (111-35-36)

This is another moderate-sized stream with good spawning habitat. Here again, beaver activity supplies habitat for Cutthroat trout, Dolly Varden char, and Coho salmon fry. The channel meanders along the valley bottom for about 2,000 feet before rising up a steep incline. The creek empties into the same tidal flat as the previous stream. Limited escapement records indicate a sizeable Pink run of 10,000 and a moderate (500) Chum run.

7) Unnamed Creek (111-35-37)

This is a small creek rising soon after the intertidal zone. A barrier falls prevents access upstream 50 feet from MHW. Coho fry were observed below the falls and a sizeable intertidal area is available for Pink and Chum salmon.

8) Unnamed Creek (111-35-38)

This is a small creek with a moderate gradient which rises sharply approximately one mile upstream from MHW. Spawning habitat is fair to poor. Moderate Pink and Chum populations (3,000 and 1,000 respectively) have been recorded in past years. Coho fry were also observed in the creek.

9) Unnamed Creek (111-35-42)

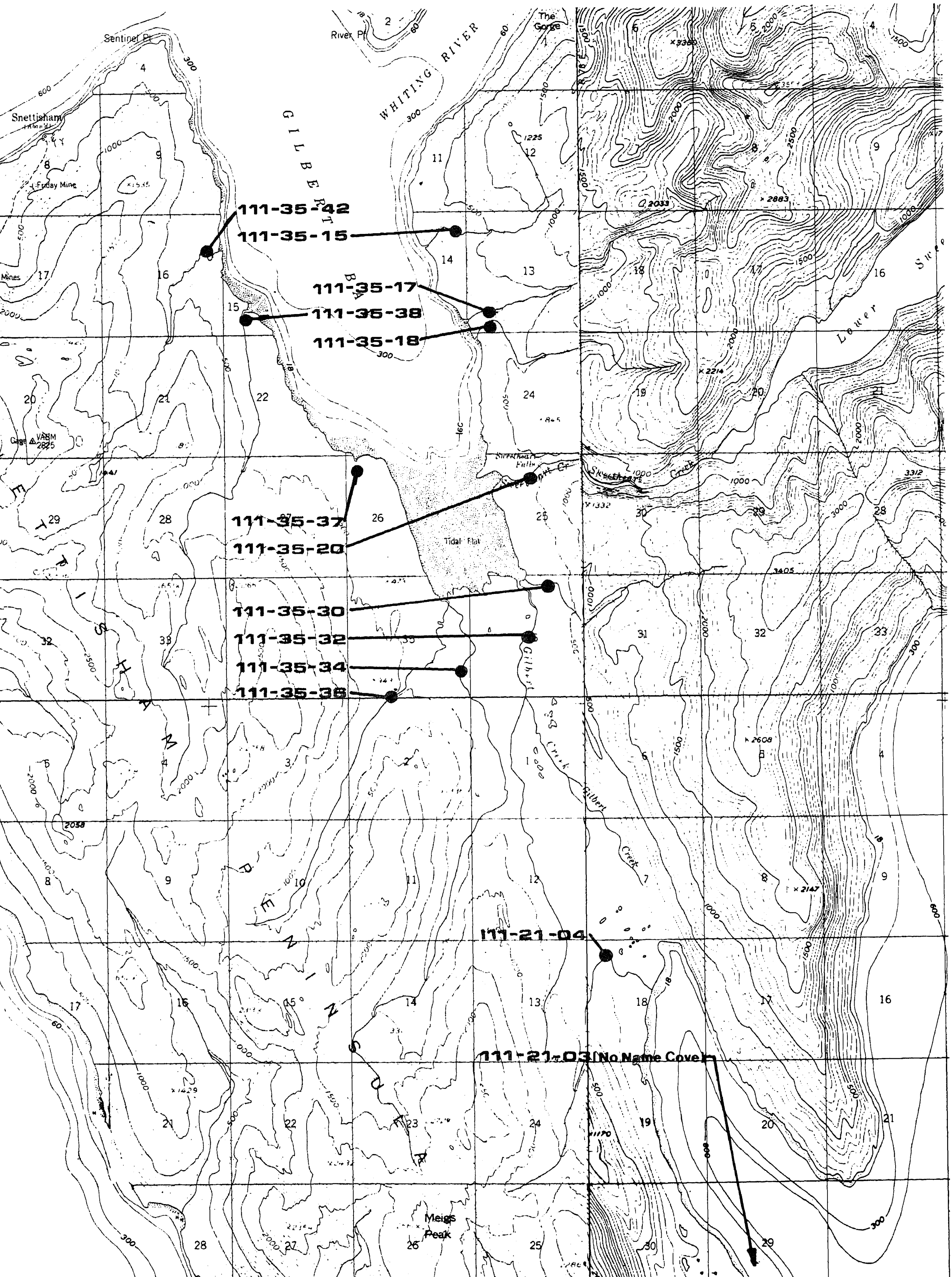
This is a small stream twisting through high canyon walls in a continuous series of small falls and rapids. A waterfall prevents passage upstream 500 feet from MHW. Fair to poor populations of Pink and Chum salmon utilize this creek. No Coho fry were observed here.

10) Unnamed Creek (111-210-04) Williams Cove

This is a small creek with moderate gradient entering saltwater near the head of Williams Cove. Stream bottom contains mainly larger cobbles with limited spawning gravel. No Coho or Dolly Varden fry were observed in the stream during investigations in 1979 (early summer). One ADF&G aerial observation estimated approximately 400 Pink salmon present during August.

11) Unnamed Creek (111-21-03) No Name Cove

No on-the-ground investigations were conducted by Forest Service biologists on this stream and no ADF&G records are available on escapements. This stream will be looked at during the summer of 1980. Reported brown bear concentrations in the vicinity would indicate probable populations of at least Pinks and Chums.


111-35-42
111-35-15
111-35-17
111-35-38
111-35-18
111-35-37
111-35-20
111-35-30
111-35-32
111-35-34
111-35-36
111-21-04
111-21-03 (No Name Cove)
Sentinel Pt
Snettisham
Friday Mine
Mines
River Pt
WHITING RIVER
The Gorge
GILBERT BAY
Tidal Flat
Sweetheart Falls
Sweetheart Cr
Sweetheart Creek
Lower Swee
Gilbert Creek
Gilbert Creek
Gage VABM 2825
SNETTISHAM PENINSULA
Meigs Peak

APPENDIX E

CHATHAM AREA INDEPENDENT SALE PROGRAM REVIEW

Regional Forester, November 13, 1978

NOTE: This is an exerpt of a memo from the Chatham Area Forest Supervisor to the Regional Forester. The original document is on file in the USDA Forest Service office in Sitka, Alaska.

We have reviewed the alternatives available to us for our independent sale program, specifically for the 30 MMbf sale scheduled for the last quarter of FY 1980. At the time our five-year Timber Sale Action Plan was prepared last winter, we programmed the Chuck River sale for our 1980 offering. Since then, the matter of Native land selection substitute areas casts some doubt over the feasibility of a Chuck River sale. Our review of the various alternatives for a Chatham Area independent sale of about 30 MMbf is as follows:

Yakutat

Yakutat forelands are listed in "TLMP Regional Forester's Recommendation" as no logging in the 1979-84 period. The timbered area north of the Dangerous River is proposed in HR-39 as wilderness. We feel the risks are too great to consider timber sale layout work here in FY '79.

Northern Lynn Canal

VCU 94 (Sullivan Island) accounts for 63% of the potential yield from the LUD III areas surrounding and including the island. It would not be possible to harvest 2/3rds of the volume from Sullivan Island for a sale in this area without impacting its visual qualities. The island lies within a mile of the ferry and tour boat traffic on Lynn Canal. It would be necessary to use an "A" frame system to log the island. That type of logging system and the amount of retention required to protect the visual qualities of the island combine to preclude an economic timber sale offering for Sullivan Island at this time.

Berner's Bay -Echo Cove

Two sale proposals indicated on this year's five-year timber sale action plan are located adjacent to Echo Cove. It is now apparent that Juneau's Gold Belt Corporation will select the heart of these sales. While some volume will be left outside of the selection area, the proposed sales appear to be uneconomic at this time. In addition to the economic factor, there is the question of right-of-way across Native selections and the question of a log transfer site location adjacent to the Juneau road system. All of these factors combine to make this area impractical as the location for a 1980 sale offering.

South Chilkat Peninsula (Excursion Inlet)

This area was the subject of reconnaissance several years ago. Of the three timber sales proposed, only one was considered economical. That sale, Homeshore, was sold this year. Under the Regional Forester's recommendations, only the west side of the peninsula facing Excursion Inlet, would be available for harvesting (LUD III or IV).

Admiralty Island

TLMP and Regional Forester's recommendation precludes logging during the 1979-84 period.

Snettisham

With the exception of Gilbert Bay-Whiting River, Snettisham timber harvesting potential is limited by steep slopes, low timber line, and lack of log dump locations.

The Gilbert Bay-Whiting River area (VCU #57) contains sufficient operable volume for a first entry sale of about 30 MMbf. This is based upon a photo estimate. That same estimate indicates some braided stream channel problems and at least one major bridge crossing.

Chuck River-Hobart Bay

Chuck River also contains sufficient volume to make a 30 MMbf first entry. However, since we originally selected Chuck River for the proposed sale, it has been designated as a Shee Atika selection substitute for the Corporation's Admiralty Island selections. At this time, we have no knowledge of how this will turn out. We should defer investing in Chuck River as a sale proposal until the off-Admiralty selection issue has been resolved.

Gilbert Bay appears to be the best of the alternatives at this time. However, there are still some problems which must be overcome:

1. The entire sale preparation job from the initial IDT effort through the EAR, all of the layout, timber cruise, road location and survey must be completed during the 1979 field season so that the road design and sale appraisal can be completed in 1980 in time for

fourth quarter sale date. We must assume that TLMP will eliminate the need for an EIS. If one is required, we won't be able to make the schedule.

2. We should have enough time to secure the necessary permits for the log transfer site, provided the site is acceptable to all parties and there are no delays. That may or may not be the case.

3. One problem which must be resolved at a higher level than ours concerns the Forest Service policy regarding timber sale preparation in a roadless area. Present policy forbids this activity. We will need your authorization to conduct the sale layout job. Without that authorization, the Chatham Area will not be able to offer an independent sale of 30 MMbf in 1980. TLMP may resolve this issue, but it must be done by April 15.

The following table has been developed to indicate the operable CFL acreage in volume for all of the VCU's from which independent volume may be harvested. We have blocked the VCU's together geographically and indicated the potential yield for the total operable volume. We have used a blanket 30% deduction for environmental concerns for all but Hobart Bay. This area ran heavily to LUD IV and therefore a blanket 15% deduction was made for Hobart Bay.

Area	Operable CFL	Annual Potential Yield
Hobart Bay VCU's 68-77, 80-83	55,566 acres	10.4 MMbf
Snettisham VCU-s 50-58	16,949 acres	3.3 MMbf
Excursion Inlet VCU-s 118-123	7,877 acres	1.0 MMbf
Berner's Bay VCU's 12, 23, 24	3,378 acres	0.6 MMbf
Sullivan Island VCU's 94-97	4,998 acres	0.5 MMbf
Total available potential yield for Independent Program		15.8 MMbf

To harvest the total operable potential yield of 15.8 MMbf annually, means harvesting all of the standard and special yield components.

This would have to be accomplished in a number of very sensitive areas such as Sullivan Island and Berner's Bay. It also means resolving the off-Admiralty substitute selections. We must at this time, assume that Goldbelt will acquire the Hobart Bay exchange lands. Hence, our projected potential yield is 9 MMbf/year for the independent sale program. Other exchanges would reduce this volume further.

APPENDIX F

SITE SUITABILITY ANALYSIS OF POTENTIAL RECREATION DEVELOPMENT IN THE GILBERT BAY/HOLKHAM BAY AREA

January 30, 1980
Prepared by: Donald W. Fisher, Landscape Architect; Kenneth Mitchell, Forester

IDENTIFICATION OF RECREATION DEVELOPMENT POTENTIAL

I. Direction for Recreation Development: The direction for recreation analysis of the Holkham Bay Management Area is found in the Tongass Land Management Plan (TLMP) and Senate Bill H.R. 39 (Report No. 96413).

TLMP management direction for Holkham Bay Management Area is as follows:

> Major activity emphasis will be toward developed recreation and destination sites for use by visitors to the nearby proposed Tracy Arm-Fords Terror Wilderness. The establishment of a marina and recreation use site is currently being studied as an entry point for the proposed Tracy Arm-Fords Terror Wilderness. Examination of the cultural/historical value of the Fox Farm site at the entrance to Holkham Bay is needed.

Senate Bill H.R. 39 states:

> For the purposes of providing for access, public safety, or public accommodation or services relative to recreational use of the proposed Tracy Arm-Fords Terror Wilderness, the Secretary is authorized to use up to one hundred and sixty acres at one or more sites at the western end of the wilderness in the vicinity of Sumdum, Williams Cove, or Harbor Island.

The direction for recreation analysis of Gilbert Bay is found in the TLMP management direction for Port Snettisham Management Area which states:

> Plans are needed for saltwater-related recreation management such as anchorages, camp sites, cabins, and trails.

II. Preliminary Investigation of Potential Recreation Development Sites:

A reconnaissance of potential resort sites was conducted by Ken Mitchell, Forester, and Doug Barber, Civil Engineer, on February 17, 1978. This study provided preliminary site investigations in regard to potential resort development at Sanford Cove, the sand spit at the entrance to Tracy Arm, Williams Cove, No Name Cove, and Harbor Island. As a result of this effort, a recommendation was made from an indepth feasibility study of potential sites for recreation development.

On August 13, 1979, a recreation resort feasibility study was prepared by John Costello, Landscape Architect. This study identified Williams Cove and No Name Cove as having good potential for recreation facility development. In addition, Sanford Cove and the sand spit at the entrance to Tracy Arm were considered. However, these areas were thought to be under consideration for wilderness designation.

An analysis of potential resort sites in the Holkham Bay area was prepared by Ben Mitchell, Planner, on January 11, 1980. This analysis was done through interpretation of aerial photographs. The following sites were identified and evaluated for possible recreation resort development: No Name Cove, Sanford Cove, Harbor Island and Williams Cove. Copies of the preliminary analysis mentioned above are available at the Forest Service office in Sitka.

AREAS DELETED FROM CONSIDERATION FOR RECREATION DEVELOPMENT

I. Sanford Cove

Sanford Cove was deleted from consideraton for the following reasons:

A. A tract encompassing 10 acres has been nominated for selection under ANSCA as an historical site (Site No. 1069).

II. Sand Spit at the Entrance to Tracy Arm

This site was deleted from consideration due t several factors. These include open exposure to winds and wave action with no natural protection, exposure to iceberg hazards, and lack of adequate boat anchorage area and potential marina development site.

COMPARISON CRITERIA FOR DETERMINING RECREATION DEVELOPMENT POTENTIAL

I. Primitive Campsite Development

Attractive Site
Suitable terrain (size/slope)
Freshwater supply
Isolation from bear habitat
Good saltwater access

II. Recreation Cabin

Attractive site
Suitable terrain (size/slope)
Freshwater supply
Potential anchorage
Float plane access
Close proximity to hunting and fishing opportunities
Isolated setting
Potential trail development to scenic areas

III. Moderate Lodge/Resort (50-75 Person Capacity)

Attractive site
Suitable terrain (size/slope)
Potential marina site
Potential float plane access
Potential trail development to scenic areas
Reasonable proximity to fishing opportunities
Freshwater supply

IV. Major Lodge/Resort (150-200 Person Capacity)

Attractive site
Suitable terrain (size/slope)
Potential marina site
Freshwater supply
Potential airfield site for plane access
Potential trail development to scenic areas
Reasonable proximity to fishing opportunities

EVALUATION OF POTENTIAL RECREATION DEVELOPMENT SITES

I. Harbor Island:

A. Site Attractiveness - island setting is attractive and offers physical isolation. Provides panoramic view of Tracy Arm and Endicott Arm. Existing structures associated with the abandoned fox farm somewhat reduce primitive qualities of the island.

B. Suitable Terrain - island is approximately 350 acres which provides adequate space for all potential levels of development. Slope is capable of supporting development.

C. Freshwater Supply - Freshwater is limited if available. There is possibly a small spring at the abandoned Fox Farm. This supply would be adequate for recreation cabin use only.

D. Anchorage - boat anchorage may be possible by a mooring buoy. Marina development is unfeasible due to shallow water and exposure to winds. Good beach access for skiffs and kayaks.

E. Plan Access - float plane access is dependent upon weather conditions. The island size prohibits development of an airstrip.

F. Proximity to Hunting/Fishing Opportunities - the rich marine environment surrounding the island provides excellent fishing potential. However, a boat would be required. Hunting would require boat travel to adjacent mainland areas.

G. Potential Trail Development - the island provides no opportunity for scenic trail development. However, immediately across Endicott Arm there is an existing trail from the beach to Sumdum Glacier.

H. Isolation from Bear Habitat - this island environment offers complete protection from potential bear encounters.

II. No Name Cove:

A. Site Attractiveness - the enclosure provided by the cove is an attractive feature. The estuarine environment at the head of the cove offers a rich contrast with the adjacent forested hillside. The natural enclosure of the cove restricts view to the Holkham Bay area. However, potential sites outside the cove provide panoramic views of Tracy Arm, Holkham Bay, and Endicott Arm.

B. Suitable Terrain - there are several sites outside the cove along Tracy Arm, as well as a site at the head of the cove, which offer suitable topography for recreation facility development. The land area outside the cove which is suitable for development is unlimited. However, the site inside the cove is limited to approximately five acres for development.

C. Freshwater Supply - there is adequate freshwater available from a stream that enters the head of the cove.

D. Anchorage - a mooring buoy would enhance the anchorage at this site. There is adequate space and water depth for the development of marina facilities. A natural reef at the entrance to the cove provides somewhat of a breakwater effect. This action slows the movement of icebergs into the cove, thus reducing hazard to boaters.

E. Plane Access - the cove offers protection from a north wind. However, partial exposure to south winds may restrict float plane access during adverse weather conditions. There appears to be an adequate site for a 2,500 L.F. airfield along Tracy Arm for site access. A 5,000 L.F. airfield for jet access may also be possible at this location.

F. Proximity to Hunting/Fishing Opportunities - the stream which empties into the head of the cove offers potential salmon fishing. The adjacent land area has been identified as a bear habitat area frequented by guided hunting parties. This situation has the potential of creating a human/bear conflict with regard to recreation development.

G. Potential Trail Development - potential exists for development of a trail to the alpine area along the ridge west of No Name cove. From this location, visitors would be provided a panoramic view encompassing Admiralty Island, Tracy Arm, and Endicott Arm.

H. Isolation from Bear Habitat--As mentioned above, this area has been identified as a bear habitat. Thus human encounters with bear should be anticipated.

III. Williams Cove

A. Site Attractiveness - this site is located at the head of Williams Cove. There are no significant natural features which enhance this site. Views from the head of the cove are restricted to the Holkham Bay area. However, the absence of noticeable human intrustion in this area enhances primitive opportunities. This site is immediately adjacent to a proposed timber harvest which may impact primitive recreation opportunities.

B. Suitable Terrain - the land area at the head of Williams Cove offers suitable topography and unlimited acreage for potential development.

C. Freshwater Supply - adequate water supply for all levels of potential development is available from a stream located to the west of the potential development site.

D. Anchorage - the head of Williams Cove offers limited potential for a mooring buoy anchorage. Although complete protection from north wind is provided, the cove is fully exposed to south wind. This condition leads to occasional buildup of icebergs at the head of the cove. There is adequate space and water depth for possible marina development.

E. Plane Access - as mentioned above, the cove offers complete protection from north wind. However, exposure to south winds would restrict float plane access during adverse weather conditions. There appears to be an adequate site for a 2,500 linear foot (L.F.) airfield for small/moderate plane use. In addition, a 5,000 L.F. airstrip may be possible in the adjacent proposed timber sale area.

F. Proximity to Hunting/Fishing Opportunities - the Williams Cove area itself offers little in regard to hunting and fishing. However, the logging road associated with the proposed timber sale would provide access to hunting and fishing opportunities in the Gilbert Bay area.

G. Potential Trail Development - potential exists for development of a trail to Meigs Peak, west of Williams Cove. From this location, visitors would be provided a panoramic view encompassing Admiralty Island, Tracy Arm, and Endicott Arm. There also exists the opportunity of extending a trail from the proposed logging road up to the ridge along the west side of Tracy Arm. This would offer the visitor with an outstanding panoramic view of the Tracy Arm fiord and surrounding area.

H. Isolation from Bear Habitat - signs of bear activity have been observed in this area. Therefore, human encounters with bear should be anticipated.

IV. Gilbert Bay

A. Site Attractiveness - this site is located adjacent to the estuary of Gilbert Bay. The contrast between the grass flats and surrounding forested hillsides provides an attractive setting. In addition, the waterfall on Sweetheart Creek enhances the site. Minimal evidence of human intrusion in this area enhances primitive recreation opportunities. However, proposed timber harvest in Gilbert Valley, under TLMP allocation, would create potential impacts on primitive recreation opportunities.

B. Suitable Terrain - land area for recreation facility development is restricted by wildlife habitat retention and topography. Potential sites would accomodate recreation cabins only.

C. Freshwater Supply - freshwater in unlimited supply is provided by Sweetheart Creek. However, this area is under United States Geological Survey power withdrawal.

D. Anchorage - Gilbert Bay offers adequate space and water depth for mooring buoy anchorage.

E. Plane Access - Gilbert Bay provides partial protection from southerly winds. However, the bay is fully exposed to north winds. Thus, float planes access appears feasible except during adverse weather conditions and strong north or southerly winds.

F. Proximity to Hunting/Fishing Opportunities - the estuarine environment of Gilbert Bay provides excellent fishing opportunities. These include the taking of crabs and clams. In addition, Sweetheart Creek has been identified as one of the top 100 fishing streams in southeast Alaska for the taking of Pink salmon. The grassflats of Gilbert Bay also provide excellent waterfowl hunting.

G. Potential Trail Development - Potential exists for development of a trail to the alpine area just north of Sweetheart Lake. There also exists the opportunity of extending a trail from the proposed logging road up to the ridge along the west side of Tracy Arm. This would provide the visitor with an outstanding panoramic view of the Tracy Arm fiord and surrounding area.

H. Isolation from Bear Habitat - bear have

COMPARISON OF POTENTIAL DEVELOPMENT SITES

Note: The rating of each site against the comparison criteria will be as follows:

1 = low potential/availability

2 = moderate potential/availability

5 = high potential/availability

I. Primitive Campsite Development

Comparison Criteria	Harbor Island	No Name Cove	Williams Cove	Gilbert Bay
Attractive Site	5	3	1	1
Suitable Terrain	5	5	5	5
Freshwater Supply	1	5	5	5
Isolation from Bear Habitat	5	1	1	1
Total =	16	14	12	12

II. Recreation Cabins:

Comparison Criteria	Harbor Island	No Name Cove	Williams Cove	Gilbert Bay
Attractive Site	5	3	1	3
Suitable Terrain	5	5	5	5
Freshwater Supply	1	5	5	5
Potential Anchorage	3	5	1	3
Float Plane Access	1	5	3	3
Close proximity to hunting/fishing	3	5	3	5
Isolated Setting	5	5	3	1
Potential Scenic Trail Development	1	3	5	5
Total =	24	36	26	30

III. Moderate Lodge/Resort:

Comparison Criteria	Harbor Island	No Name Cove (Inside)	No Name Cove (Outside)	Williams Cove
Attractive Site	5	3	5	1
Suitable Terrain	3	3	5	5
Freshwater Supply	1	5	5	5
Potential Marina	1	5	5	3
Potential Airstrip Development	1	3	3	3
Reasonable Proximity of Fishing	5	5	5	3
Potential Scenic Trail Development	1	3	3	5
Total =	17	27	31	25

IV. Major Lodge/Resort

Comparison Criteria	Harbor Island	Cove (Inside)	No Name Cove (Outside)	No Name Williams Cove
Attractive Site	5	3	5	1
Suitable Terrain	3	3	5	5
Freshwater Supply	1	5	5	5
Potential Marina	1	5	5	3
Potential Airstrip Development	1	3	3	3
Reasonable Proximity to Fishing	5	5	5	3
Potential Scenic Trail Development	1	3	3	5
Total =	17	27	31	25

RECOMMENDED RECREATION DEVELOPMENT ALTERNATIVES

The following range of alternatives is recommended for detailed analysis. The alternatives offer a range of accommodations ranging from primitive to fully-developed facilities.

Alternative C- Provide primitive recreation campsites and recreation cabins.

Primitive campsites -Harbor Island

Recreation cabin -No Name Cove,
Gilbert Bay

Trail development - No Name Cove
Gilbert Bay
Williams Cove

Alernative D - Provide primitive campsites, recreation cabin, and moderate lodge/resort facilities.

Primitive campsites - Harbor Island

Recreation cabin - Gilbert Bay

Moderate lodge/resort -No Name Cove

Trail development -Gilbert Bay
No Name Cove
Williams Cove

Alternative E - Provide recreation cabins and moderate lodge/resort facilities.

Recreation cabins - Harbor Island
Gilbert Bay

Moderate lodge/resort - Williams Cove

Trail development - Gilbert Bay
Williams Cove

Alternative F - Provide primitive campsites, recreation cabin, and major lodge/resort facilities.

Primitive campsites -Harbor Island

Recreation cabin -Gilbert Bay

Major lodge/resort -No Name Cove

Trail development -Gilbert Bay
No Name Cove
Williams Cove

Alternative G - Provide recreation cabins and major lodge/resort facilities.

Recreation cabins - Harbor Island
Gilbert Bay

Major lodge/resort-Williams Cove

Trail development -Gilbert Bay
Williams Cove

APPENDIX G

EFFECTS OF TIMBER HARVEST ON STREAM SEDIMENT AND TEMPERATURE

Sediment Studies:

Treatment	Variation In Suspended Sediment	Source	Location
Clearcut	No significant increase	Meehan et al, 1969	S.E. Alaska
Logging	No significant increase	James, 1957	Maybeso Creek, Alaska
Clearcut with skyline system	Less than 15 ppm	Brown & Krygier, 1971	Oregon Coast Range
Clearcut with high lead	Increases averaged over 100 times the undisturbed areas	Fredriksen, 1970	West Oregon
Clearcut 100%	Significant increase (unquantified)	Hall, et al, 1969, Lantz, 1971	Coastal Oregon
Patch cut 30% with leave strips	No significant change	Hall et al, Lantz, 1969	Coastal Oregon

Temperature Studies:

Treatment	Variation in Temperature	Source	Location
Clearcut 25% with leave strips	No change	Brown & Krygier, 1970	Oregon Coast
Most riparian vegetation removed	+7? to + 12?F increase in mean monthly maximum	Levno & Rothacher, 1967	Oregon Cascades
Clearcut, no buffers	+16?F maximum	Hall et al 1969	Oregon Coast

PPENDIX H

OCIOECONOMIC ANALYSIS OF TIMBER HARVEST LTERNATIVES

he cost of offering, administering, and anaging a timber sale has been estimated using SDA Forest Service, Region 10, FY '80 budget ata. Average cost, excluding purchase road redits and other unusual entries, is estimated o be $31 per Mbf.

enefits are estimated using recent (1978 and 979) timber bid price data from the Tongass ational Forest. A weighted average of the bid rice is $84.90/Mbf.

ssuming 6,102 Mbf will be removed each of the irst five years, summing to 30,510 Mbf, and ,000 Mbf will be removed during year 20, using 7 1/2 percent interest rate, the benefit/cost atio for Alternatives A or B is estimated to e 2.74:1. This means that for each dollar pent, $2.74 will be earned.

f the No Action alternative is selected, imber benefits will not be earned and costs ill not be incurred. However, the ratio of enefits sacrifices to costs foregone is .74:1, for each dollar of cost saved, $2.74 of enefits will be foregone.

astly, the 19 miles of system roads in lternative A and the 21 miles in Alternative B lso substantially reduce stumpage values. hese roads have been estimated to cost pproximately $135,000 per mile, with the cost eing written off against stumpage revenue uring the first five-year entry. ransportation and log haul costs are estimated o be $2,900,000 for Alternative A, and 3,900,000 for Alternative B. However, ermanent system roads will not only be used or subsequent timber entries, but are also vailable throughout their life for recreation se. Permanent roads, on the other hand, which re used during subsequent entries will ncrease the stumpage revenue accruing to the ederal Government at a later point in time.

nother beneficiary of the timber sale is the tate of Alaska, which receives 25% of net tumpage plus the cost of system roads. The tate of Alaska redistributes a portion of the oney to the cities and boroughs in Southeast laska. At the estimated minimum sales price, he 25% transfer will be approximately $250,000 ver the five-year period. Because system oads are not included in the benefit estimation, this figure was not included in the benefit/cost calculation. Even more important, if stumpage rates are bid up, the transfer will be even larger.

Selecting an alternative that does not provide for the proposed independent timber sale has a number of local employment consequences. The table below rates average employment in the logging, lumber and pulp industries for the period 1970 through 1976.

Average Annual Numbers	
Logging	1170
Lumber	565
Pulp	1095

These numbers reflect the direct employment attributable primarily to the sale of timber from the Tongass National Forest. Other direct employment (bargemen, longshoremen, bookkeepers, mechanics, etc.) cannot be estimated here. Employment induced by the expenditure of direct wages and salaries in Southeast Alaska is also substantial.

The number of employees listed as employed in the lumber and pulp industries (1,660), is almost exclusively attributable to primary processing provisions of USDA Forest Service timber sale contracts. The estimated processing employment generated each year of the proposed five-year timber sale, Alternative A or B, is 19. Sale-related logging employment is forecast to average 13 throughout the year, although peak monthly employment will undoubtedly be greater.

Another facet of the proposed sale is that it is a small business set-aside. The Small Business Administration will disqualify a successful bidder who fails to satisfy certain size-related criteria. Communities which might benefit from this sale include Haines, Petersburg, Klawock and Ketchikan. Independent operators own mills in these communities, and could conceivably bid on the sale. The sale area is located within the boundaries of the City and Borough of Juneau. With a population of almost 24,000, Juneau's economic base is predominantely founded on local, State and Federal Government employment; timber harvesting or wood processing have never been factors of significance to Juneau's economy.

APPENDIX I

ESTIMATED ANNUAL PUBLIC USE ASSOCIATED WITH MAJOR AND MODERATE LODGE/RESORT DEVELOPMENT

The following assumptions were used in estimating the impacts of a moderate lodge/resort:

- The season of use would be 120 days between May 15 and September 15.

- Average resort occupancy would be 60 persons including those using the backpack campground.

- Visitors would average a three-day stay at the resort, two of which would be spent touring the Tracy Arm-Fords Terror area.

- The majority of visitors would tour the area in resort-operated cruise boats.

- Private recreation boat visits would average five persons per boat.

- Private boat visits would peak on weekends and holidays.

Annual public use resulting from the implementation of this alternative is estimated as follows:

	Resort Operated Cruise Boat (Future)	Private Boat (Exist.)	Alaska Ferry Tours (Exist.)	Tour Ships (Future)	Aircraft (Future)	Total
Persons visiting the resort	2400	1000	4600	4000	500	12,500
Person days at resort	2400	1000	0	0	400	3,800
Person days touring area	4800	2000	4600	4000	100	15,500
Total person days	7200	3000	4600	4000	500	19,300
Boat days at resort	40	200	0	0	100	340
Boat days touring area	80	400	23	20	80	603
Total boat days	120	600	23	20	100	863

The following assumptions were used in estimating the impacts of a major lodge/resort:

- The season of use would be 120 days betwen May 15 and September 15.

- Average resort occupancy would be 200 persons, including those using the campground.

- Visitors would average a three-day stay at the resort, two of which would be spent touring in the Tracy Arm-Fords Terror area.

- The majority of resort visitors would tour the area in resort-operated cruise boats.

- Private recreation boat visits would average five persons per boat.

- The Alaska Marine Highway ferry would service the resort area.

Annual public use resulting from the implementation of this alternative is estimated as follows:

	Resort Operated Cruise Boat (Future)	Private Boat (Future)	Alaska Ferry Tours (Exist.)	Tour Ships (Exist)	Aircraft (Future)	Total
Persons visiting the resort	8,000	1,500	4,600	4,000	1,500	19,600
Person days at resort	8,000	1,500	0	0	1,200	10,700
Person days touring area	16,000	3,000	4,600	4,000	300	27,900
Total person days	24,000	4,500	4,600	4,000	1,500	38,600
Boat days at resort	120	500	0	0	300	920
Boat days touring area	210	1,000	23	20	240	1,493
Total boat days	330	900	23	20	300	1,573

APPENDIX J

ECONOMIC ANALYSIS OF RECREATION ALTERNATIVES

Benefit/cost ratios are calculated using a 30-year facility life, an interest rate of 7 1/2 percent, and the facility cost and annual benefit extracted from the sections entitled "Effects of Implementation Recreation/Wilderness Resources," "Cost Estimate for Proposed Recreation Development, Gilbert Bay/Holkham Bay Area," and data extracted from "Reconnaissance of Potential Resort Sites - Holkham Bay". Capital costs are annualized, to which are added maintenance and operation costs and USDA Forest Service management and overhead costs, with the sum divided into the estimated benefits to yield a benefit/cost ratio. Benefits are calculated by multiplying user charges, if any, by the estimates of use found in "Effects" cited above. When user charges are not imposed, values are imputed.

A major difficulty presents itself when dealing with the resort options. If the Forest Service merely issues a special use permit, collecting an annual fee, a benefit/cost ratio can be calculated by comparing the fee with the cost of preparing and administering the permit plus the value of other production foregone. Unfortunately, at this point in time, no one knows how profitable a resort might be, and consequently, the magnitude of the fee. An estimation of profitability can and is made; however, it is based upon rather limited data sources cited above. The clearest indication regarding the expected profitability of operating a resort at No Name or Williams Cove, is the interest expressed by potential resort operators in acquiring an unsubsidized special use permit.

Using prices for similar resorts in Southeast Alaska as a starting point and deducting building and operating costs, etc., projected costs clearly outweigh projected revenue for the proposed resorts.

Of all the components included in the proposed resort, the aircraft landing strips appear to add very significantly to facility cost. Advantages exist if patrons are transported to the resort by boat. It is also appropriate to note that use forecasts, especially for the resort proposals, should be viewed as ultimate use rates, a rate which can only be expected after the resort establishes itself and develops a national reputation. While the attractiveness of a recreation facility may be enhanced if it is located adjacent to a wilderness area, remote locations have a number of drawbacks; transportation is costly, facility construction is costly, and use is primarily during the four-month summer period.

Resorts, because of their high cost, constitute a very risky investment for a private operator or the Federal Government, and the benefit/cost ratios listed below should be used with caution.

Benefit/Cost Ratios

Alternative	Benefit/Cost Ratios
C	.056:1
Harbor Island Primitive Campsite	.412:1
Gilbert Bay Cabin	.041:1
No Name Cove Cabin	.027:1
D	.700:1
Harbor Island Primitive Campsite	.412:1
Gilbert Bay Cabin	.040:1
No Name Cove Moderate Resort	.715:1
E	.774:1
Harbor Island Cabin	.136:1
Gilbert Bay Cabin	.040:1
Williams Cove Moderate Resort	.800:1
F	.390:1
Harbor Island Primitive Campsite	.412:1
Gilbert Bay Cabin	.040:1
No Name Cove Major Resort	.389:1
G	.390:1
Harbor Island Cabin	.136:1
Gilbert Bay Cabin	.040:1
Williams Cove Major Resort	.389:1

APPENDIX K

COST ESTIMATE FOR POTENTIAL RECREATION DEVELOPMENT

GILBERT BAY/HOLKHAM BAY AREA

February 8, 1980

Prepared by: Ben Mitchell,
Civil Engineer

UMMARY OF RECREATION ALTERNATIVES

ternative	Cost
ternative C -(w/Gilbert Bay site option #1)	$352,000
/Gilbert Bay site option #2)	317,000
/Gilbert Bay site option #3)	230,000
ternative D - No Name Cove Resort Site, Option #1	
/Gilbert Bay site option #1)	3,762,000
/Gilbert Bay site option #2)	3,727,000
/Gilbert Bay site option #3)	3,640,000
ternative D - No Name Cove Resort Site, Option #2	
(w/Gilbert Bay site option #1)	3,637,000
(w/Gilbert Bay site option #2)	3,602,000
(w/Gilbert Bay site option #3)	3,515,000
ternative E - Williams Cove Resort Site, tion #1 or #2	
(w/Gilbert Bay site option #1)	3,587,000
(w/Gilbert Bay site option #1 using log dump marina)	3,377,000
(w/Gilbert Bay site option #2 and new marina)	3,552,000
(w/Gilbert Bay site option #2 using log dump marina)	3,342,000
(w/Gilbert Bay option #3 and new marina)	3,465,000
(w/Gilbert Bay option #3 using log dump marina)	3,255,000
ternative F - No Name Cove Resort Site, Option #1 of #2	
(w/Gilbert Bay site option #1 and 2500' airstrip)	12,071,000
(w/Gilbert Bay site option #1 and 5000' airstrip)	19,071,000
(w/Gilbert Bay site option #2 and 2500' airstrip)	12,036,000
(w/Gilbert Bay site option #2 and 5000' airstrip)	19,036,000
(w/Gilbert Bay site option #3 and 2500' airstrip)	11,949,000
(w/Gilbert Bay site option #3 and 5000' airstrip)	18,949,000

Alternative G -

(w/Gilbert Bay site option #1, new marina, 2500' airstrip)	12,296,000
(w/Gilbert Bay site option #1, new marina, 5000' airstrip)	19,296,000
(w/Gilbert Bay site option #1, log dump marina, 2500' airstrip)	12,036,000
(w/Gilbert Bay site option #1, log dump marina, 5000' airstrip)	19,036,000
(w/Gilbert Bay site option #2, new marina, 2500' airstrip)	12,261,000
(w/Gilbert Bay site option #2, new marina, 5000' airstrip)	19,261,000
(w/Gilbert Bay site option #2, log dump marina, 2500' airstrip)	12,001,000
(w/Gilbert Bay site option #2, log dump marina, 5000' airstrip)	19,001,000
(w/Gilbert Bay site option #3, new marina, 2500' airstrip)	12,174,000
(w/Gilbert Bay site option #3, new marina, 5000' airstrip)	19,174,000
(w/Gilbert Bay site option #3, log dump marina, 2500' airstrip)	11,914,000
(w/Gilbert Bay site option #3, log dump marina, 5000' airstrip)	18,914,000

COST ESTIMATE PER ALTERNATIVE:

Alternative C:			Cost
Harbor Island -	primitive campsite		$ 12,000
	Mooring Buoy		2,000
		Total	14,000
No Name Cove -	Recreation cabin		23,000
	Mooring Buoy		2,000
	Hiking Trail (4 miles)		140,000
		Total	165,000
Gilbert Bay (option #1)			
	Recreation cabin		23,000
	Mooring Buoy		2,000
	Hiking Trail (3.5 miles)		122,000
		Total	147,000

ilbert Bay (option #2)

Recreation Cabin		23,000
Mooring Buoy		2,000
Hiking Trail (2.5 miles)		87,000
	Total	112,000

ilbert Bay (option #3)

Recreation Cabin		23,000
Mooring Buoy		2,000
	Total	25,000

illiams Cove - hiking trail (.75 miles)	26,000

lternative D

arbor Island -	Primitive campsites		12,000
	Mooring Buoy		2,000
		Total	14,000

o Name Cove (Option #1)

Moderate lodge/resort		2,600,000
Road (.5 miles)		250,000
Sewer/water (75 persons)		112,000
Marina		460,000
Backpackers campground		18,000
Trail (3 miles)		105,000
Electrical Distribution		30,000
	Total	3,575,000

o Name Cove (option #2)

Moderate lodge/resort		$ 2,600,000
Road (.25 miles)		125,000
Sewer/water (75 persons)		112,000
Marina		460,000
Backpackers campground		18,000
Trail (3 miles)		105,000
Electrical distribution		30,000
	Total	3,450,000

ilbert Bay (option #1)

Recreation Cabin		23,000
Mooring Buoy		2,000
Hiking Trail (3.5 miles)		122,000
	Total	147,000

ilbert Bay (option #2)

Recreation Cabin		23,000
Mooring Buoy		2,000
Hiking Trail (2.5 miles)		87,000
	Total	112,000

Gilbert Bay (option #3)

Recreation Cabin		23,000
Mooring Buoy		2,000
	Total	25,000

Williams Cove - hiking trail (.75 miles)	26,000

Alternative E

Harbor Island -	Recreation Cabin		23,000
	Mooring Buoy		2,000
		Total	25,000

Williams Cove (option #1 and #2)

Moderate lodge/resort	2,600,000
Road (.25 miles)	125,000
Sewer/water (75 persons)	112,000
*Marina	460,000
*Marina (using abandoned log dump)	250,000
Backpackers campground	18,000
Hiking trail (2 miles)	70,000
Electrical Distribution	30,000
*Total w/new marina	3,415,000
*Total w/log dump marina	3,205,000

Gilbert Bay (option #1)

Recreation Cabin		23,000
Mooring Buoy		2,000
Hiking Trail (3.5 miles)		122,000
	Total	147,000

Gilbert Bay (option #2)

Recreation Cabin		23,000
Mooring Buoy		2,000
Hiking Trail (2.5 miles)		87,000
	Total	112,000

Gilbert Bay (option #3)

Recreation Cabin		23,000
Mooring Buoy		2,000
	Total	25,000

Alternative F

Harbor Island	Primitive campsites		12,000
	Mooring Buoy		2,000
		Total	14,000

No Name Cove (option #1 and #2)

Major lodge/resort	7,100,000
Road (2 miles)	1,000,000
Parking for 50 vehicles	42,000
Sewer/water (200 persons)	300,000

Hiking trail (4 miles)	140,000
*2500 L.F. airstrip (small plane capacity)	1,000,000
*5000 L.F. airstrip (jet capacity)	8,000,000
Electrical distribution	40,000
*Total w/2500' airstrip	11,884,000
*Total w/5000' airstrip	18,884,000

ay (option #1)

Recreation cabin	23,000
Mooring Buoy	2,000
Hiking Trail (3.5 miles)	122,000
Total	147,000

ay (option #2)

Recreation Cabin	23,000
Mooring Buoy	2,000
Hiking Trail (2.5 miles)	87,000
Total	112,000

ay (option #3)

Recreation Cabin	23,000
Mooring Buoy	2,000
Total	25,000

Cove - hiking trail (.75 miles)	26,000

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land

Recreation Cabin	23,000
Mooring Buoy	2,000
Total	25,000

Cove

Major lodge/resort	7,100,000
Road (2 miles)	1,000,000
Parking for 50 vehicles	42,000
Sewer/water (200 persons)	300,000
*Marina w/ferry dock (using abandoned log dump)	1,800,000
*Marina w/ferry dock (new facilities	2,100,000
Backpackers/vehicle campground	162,000
Hiking trail (5 miles)	420,000
*2500' airstrip (small plane capacity)	1,000,000
*5000' airstrip (jet capacity)	8,000,000
Electrical Distribution	40,000

*Total w/new marina and 2500' airstrip	12,124,000
*Total w/new marina and 5000' airstrip	19,124,000
*Total w/log dump marina and 2500' airstrip	11,864,000
*Total w/log dump marina and 5000' airstrip	18,864,000

Gilbert Bay (option #1)

Recreation Cabin	23,000
Mooring Buoy	2,000
Hiking trail (3.5 miles)	122,000
Total	147,000

Gilbert Bay (option #2)

Recreation Cabin	23,000
Mooring Buoy	2,000
Hiking trail (2.5 miles)	87,000
Total	112,000

Gilbert Bay (option #3)

Recreation Cabin	23,000
Mooring Buoy	2,000
Total	25,000

COST ESTIMATE DATA		COST
1. Primitive campsite (each)	$	12,000
2. Mooring buoy (each)		2,000
3. Recreation Cabin (each)		23,000
4. Hiking trail (per mile)		35,000
5. Roads (per mile)		500,000
6. Backpackers campground (10-15 units)		18,000
7. Backpackers/vehicle campground (20-30 units)		162,000
8. 2500' airfield (each)		1,000,000
9. 5000' airfield (each)		8,000,000
10. Sewer/water (per person)		1,500
11. Moderate Lodge/Resort - capacity 50-75 people (354 S.F. @$99.00 x 75 people)		2,600,000
12. Major Lodge/Resort - capacity 150-200 people (354 S.F. @$99.00 x 200 people)		7,100,000
13. Moderate Lodge/Resort Marina (each)		
Floating Breakwater - 250' @ $1200		300,000
8' wide floats - 200' @ $240		48,000
10' wide approach - 70' @ $600		42,000
Gangway		20,000
Fuel Facility		50,000
Total	=	460,000

14. Moderate Lodge/Resort Marina - using abandoned log dump (each)

Floating Breakwater - 100' @ $1200		120,000
8' wide floats - 200' @ $240		48,000
10' wide approach - 20' @ $600		12,000
Gangway		20,000
Fuel Facility		50,000
Total	=	250,000

15. Major Lodge/Resort Marina (each)

Floating Breakwater - 350' @ $1200		420,000
8' wide floats - 300' @ $240		72,000
10'wide approach - 70' @ $600		42,000
Gangway		20,000
Fuel Facility		75,000
Ferry Dock		1,500,000
Total	=	2,129,000

16. Major Lodge/Resort Marina (using abandoned log dump - each)

Floating Breakwater - 150' @ $1200		180,000
8' wide floats - 300' @ $240		72,000
10' wide approach - 20' @ $600		12,000
Gangway		20,000
Fuel Facility		75,000
Ferry Dock		1,500,000
Total	=	1,859,000

17. Parking for 50 vehicles (20,000 Square Feet gravel paving)	42,000
18. Moderate lodge/resort electrical distribution	30,000
19. Major lodge/resort electrical distribution	40,000

Assumptions:

1. Roads - estimated as double lane, full clean-up, and gravel surface.

2. Backpackers campground - estimated as wood deck construction with wood plank walkways. Each site = 14' x 16' deck for tent (500 board feet).

3. Backpackers/vehicle campground - estimated as 10 sites (wood deck) for backpackers and 20 sites for vehicle camping (primitive, without individual electrical distribution).

4. Lodge/Resort - 354 Square Feet per person includes living area, kitchen, dining area, lounge, interpretive facilities, etc.

5. Parking for 50 vehicles, estimated 10 spaces at 40' x 12' and 40 spaces at 20' x 10'.

6. Costs reflect 1980 construction costs only. Administrative cost and inflation to construction period are not included.

APPENDIX L

WRITTEN PUBLIC RESPONSE

Public Response Prior to DEIS

Written public response resulted from:

- Published Notice of Intent to Prepare an Environmental Impact Statement
- Public Information Package
- Scoping Session, January 24, 1980

The following people provided written reponse:

Harry L. Rietze, Alaska Region Director, National Marine Fisheries Services

Jimmie C. Rosenbruch, Registered Guide, Glacier Guides, Inc.

Victor Lane, Registered Guide and Outfitter

Katheryn G. and Ron Maas, Taku Glacier Lodge, Inc.

Leonard Steinberg, Executive Director, Southeast Alaska Conservation Council (two letters)

Chip Thomas, Windham Bay Independent Company

Dixie Baade, Vice President for Southeast Alaska Federation of Western Outdoor Clubs

Sudie Burnham, Chairperson, Juneau Group of the Sierra Club

Written responses are available for review in the Sitka Office of the USDA Forest Service.

Public Response to DEIS

Written public response to the Draft Environmental Impact Statement are reproduced in the following pages. Each letter received by the USDA Forest Service is followed by the Agency's comments or response, where applicable, to specific points in the letter. These responses are identified numerically, corresponding to numbers entered in the left hand margin of the letters.

Written responses included constitute the full record of formal response to the Draft Environmental Impact Statement by other agencies, groups, and individuals. They are:

Letter #	
1. -	State of Alaska.
2. -	Louisiana - Pacific Corporation, Ketchikan.
3. -	Public Health Service, Department of Health and Human Services, Atlanta, Georgia.
4. -	U.S. Department of the Interior, Anchorage, Alaska.
5. -	Advisory Council On Historic Preservation, Lakewood, Colorado.
6. -	Explorer, Incorporated, Juneau, Alask
7. -	Jimmie Rosenbruch, Glacier Guides, Incorporated, Gustavus, Alaska.
8. -	Mary Ann Rosenbruch, Glacier Guides, Incorporated, Glacier Bay, Alaska.
9. -	Southeast Alaska Conservation Council Juneau, Alaska.
10. -	Windham Bay Independent Company, Juneau, Alaska.
11. -	John Swanson, Berkeley, California.
12. -	U.S. Environmental Protection Agency, Seattle, Washington.
13. -	Alaska Lumber and Pulp Company, Incorporated, Sitka, Alaska.
14. -	Martin Tengs, Chairman, Haines Boroug Assembly, Haines, Alaska.
15. -	Soil Conservation Service, Anchorage, Alaska.
16. -	Department of the Treasury, Washingto D.C.
17. -	United Southeast Alaska Gillnetters, Juneau, Alaska.

JAY S. HAMMOND, Governor

OFFICE OF THE GOVERNOR
DIVISION OF POLICY DEVELOPMENT AND PLANNING

POUCH AD
JUNEAU, ALASKA 99811
PHONE: 465-3512

May 30, 1980

CHATHAM
JUN 2 '80

walker —

Mr. William Gee
Forest Supervisor
U.S. Department of Agriculture
Chatham Area - National Forest
P.O. Box 1980
Sitka, Alaska 99835

Subject: Gilbert Bay/Holkham Bay Timber Sale DEIS
State I.D. No. FA270-80040303ES

Dear Mr. Gee:

The State of Alaska has completed review of the subject Draft Environmental Impact Statement (DEIS). We have prepared comments on the DEIS with respect to both its potential consistency with the Alaska Coastal Management Program (ACMP) and from the advisory perspective outlined in the Office of Management and Budget's Circular A-95.

A number of state agencies participated in the review process and this letter constitutes the State of Alaska's unified response. Participating agencies are the Department's of Environmental Conservation, Natural Resources, Transportation and Public Facilities, Fish and Game, Commerce and Economic Development, Community and Regional Affairs, and Health and Social Services. The Department's of Environmental Conservation and Fish and Game commented directly to you in earlier letters but have rescinded those statements in favor of having their concerns incorporated into the State response.

Our comments are conditioned by the understanding that this particular review is only part of the continuous planning process which the Forest Service and State have cooperatively developed in southeast Alaska. State participation in the Southeast Alaska Area Guide, the Tongass Land Management Plan (TLMP), and the ALP 5-year plan are other examples of this cooperative planning process. Both the State and the Forest Service have mutual interests in the effectiveness of this planning process and its resulting implications for development in southeast Alaska. We make the following comments with these mutual interests in mind.

The State of Alaska recognizes that the Forest Service is legally obligated to commit a given number of board feet of timber per year to independent buyers, that these commitments are to be met before September 30 (the end of the fiscal year for the Forest Service), and that the Federal Land Policy and Management Act withdrawals do not expire until December 1, 1980. Further, Congress has not yet acted to resolve the d-2 lands controversy. It is within these constraints that both the Forest Service and the State must approach the substantive land use decisions in southeast Alaska and cooperation is absolutely essential. The State remains committed to assisting the Forest Service in pursuing a satisfactory resolution to our mutual and individual concerns.

ANALYSIS OF THE DEIS

1 In selecting Timber Harvest Alternative B as the preferred scenario for the subject timber sale, we feel that the Forest Service has overlooked dominant and recurring concerns of both the State and the public, and in the process the possibilities inherent in Alternative A have been largely unexplored.

In looking at the historical participation and input regarding proposed development in the Gilbert Bay area, the public has gone on record over the past one and a half years in support of minimizing impact on Gilbert Bay. In regard to the proposed timber sale itself, this is clearly stated in the DEIS on page 3, "Most public response in comparison of Alternatives A and B has favored implementation of Alternative A."

The City and Borough of Juneau has documented its concern over the possibility of timber activity impacts in Gilbert Bay by designating the Sweetheart Flats Area at the head of Gilbert Bay as an Area Meriting Special Attention (AMSA) under their proposed district Coastal Management Program. Last summer, the City and Borough documented its concern to

RESPONSE TO LETTER 1
(State of Alaska)

1. In light of public response and anticipated land management direction, the Final Environmental Impact Statement has been revised with timber harvest Alternative A as the Recommended Action for the timber sale. Thus, the log transfer facility is now proposed for location in Williams Cove in order to avoid potential impacts to the valued marine environment in Gilbert Bay.

the Forest Service that it prefers logging facilities to be located in Williams Cove rather than in Gilbert Bay.

Another concern over Forest Service rationale in selecting Alternative B is raised when we consider the original Forest Service Interdisciplinary Team (IDT) was organized to produce the Environmental Assessment Report (EAR). They recommended that the log dump and transfer facility be located in Williams Cove (Alternative A) rather than in Gilbert Bay (Alternative B).

The State not only shares the concerns of the public, but has also been on record since the earliest planning stages of this project as endorsing the use of Williams Cove as the preferred site for the logging support operation.

GENERAL REMARKS ON THE DEIS

We have several comments regarding the presentation of information in
the DEIS and are concerned about what may be omissions of necessary
2 data. It is difficult to follow the general flow of the document, in
that all the alternatives were not considered separately for each
factor. For example, combining alternatives under each factor as done
in Chapter IV, "Alternatives Considered", is confusing to the reader;
they would have been clearer if separated. In the "Summary", the
recreation component of the recommended alternatives (b) should also be
summarized.

The maps in the map index are well presented, however, the same scale
should be utilized throughout. The differing scales are confusing to
the reader in attempting to visualize each alternative. The regional
3 map of southeast Alaska depicting the study area on page 2, should be
enlarged to include all of southeast Alaska, not just the immediate
surrounding area. In addition recreation is not tied to Alternative B
4 until the end of the report in Chapter VII, "Recommended Action." It
5 does not appear to be mapped as the recreation component in the map
index. It is neither clear whether the recreation component was actually
another alternative nor whether it was mapped at all. Lastly, the Land
Use map in the map index illustrates a small boat route/corridor into
6 Gilbert Bay. The impacts of the timber sale on this activity should be
addressed too.

7 The plan maps should number the named and unnamed creeks using the
Alaska Department of Fish and Game's (ADF&G) catalogued fish streams as
illustrated on page 49, Appendix D, and should be referenced in the body
of the text as well. The stream crossings by logging roads are not
8 mapped, and should be. Reference should be made on page 2 to the need
for Alaska Statutes 16.05.870 approval from ADF&G for crossings of
9 designated anadromous fish streams.

Finally, on page 2, in the section entitled "Permits Required For
Implementation of The Project", there is a statement that the City and
Borough of Juneau may require certain permits and inspections of food
services associated with lodge/resort development. In actuality, it is
the Department of Health & Social Services, Environmental Health Section,
10 that requires permits for the operation of tourist accommodations and
food service operations.

STATE CONCERNS

The majority of the State's concern over this proposed sale revolves
around the greater environmental sensitivity of Gilbert Bay as compared
to Williams Cove. By Forest Service documentation in the DEIS, Alternative A is the environmentally preferrable choice. The report states
Alternative A was not chosen because of the possible degradation of
11 visual quality. This seems to imply that visual quality overrides the
environmental consideration of the marine resources of Gilbert Bay.

Fisheries

The ADF&G has outlined in detail Gilbert Bay's value as the largest rearing area for salmon fry and fingerling within Port Snettisham. This includes the Speel and Whiting River systems which produce 10,000-70,000 adult pink salmon, 4,000-8,000 adult sockeye salmon, 5,000-7,000 adult chum salmon, 17,000 adult coho salmon and 500 Dolly Varden char. The juvenile salmon produced from the State's 76 million egg capacity fish hatchery being built within Port Snettisham several miles from Gilbert Bay will also be likely to use the Bay for early rearing. Corroborative evidence of this likelihood consists of visual observation and world literature on the subject, e.g., Manzer and Shepard, 1960; Healey, 1967; Mason, 1974; Washington Department of Fisheries, 1972; Kaczynski et al., 1973; Feller and Kaczynski, 1975; Parker and LeBrasseur, 1974; and Allen, 1974.

The Log Transfer Facility (LTF) recommended for Gilbert Bay in Alternative B would not be compatible with the use of the Bay by fish populations. This is not to discount the possible fisheries value of Williams Cove; nevertheless Gilbert Bay is much more significant to the fisheries resources because of its more productive habitat and its utilization by fish populations of the major river systems in the area.

2. Under Section IV, "Alternatives Considered" the alternatives are identified and discussed separately. The recreation components of the Recommended Action are identified in the Summary under Recommended Action.

3. If we used the same scale for the regional map on page two of the text as we used for the timber harvest Alternative A map in the map index, it would be approximately 21.4 times its present size. Expanding it to include all of S.E. Alaska would make it somewhat unwieldy.

4. The timber harvest alternatives were deliberately kept separate from the recreation alternatives in order to provide clarity and to reduce confusion. By combining the different timber harvest and recreation options, we would develop a matrix that would be confusing to most readers.

5. The recreation component of the Recommended Action is a synthesis of Alternatives D and E, excluding development at Harbor Island.

6. The foreground and middle-ground visual quality would be reduced for small boat traffic entering Gilbert Bay.

7. We initially considered this, but feel that by keeping the unnamed fish stream data together with the map in one section of the text, it is easier to interpret. It was also referenced in the text where applicable.

8. We have mapped the stream crossings as recommended.

9. The USDA Forest Service will request review of crossings of anadromous fish streams from ADF& G under Alaska Statutes 16.05.870.

10. This correction has been incorporated into the FEIS.

11. This interpretation is not correct, and is inconsistent with the IDT's selection of Alternative A as the environmentally preferred alternative. Alternative A was not selected by the IDT as the Recommended Action alternative because of the pending legislative proposals regarding the land status of that area.

Wildlife

12 Under "Wildlife" on page 18, it is stated that no significant impact to deer is anticipated due to an existing low deer population. We disagree with this conclusion. Impact will occur because the mature forest is being cut. The fact that the population is presently low is not a factor as the necessary habitat will be removed. We recommend deleting the above sentence and replacing it with: "Although the deer populations in the study area are presently low, removal of old growth forest habitat will have an adverse impact upon the overall carrying capacity of the area for deer. In fact, since the climatic conditions are more severe on mainland areas, any alteration of the old growth forest will probably have more severe impacts upon deer survival than on the adjacent island areas."

13 The Gilbert Bay area also supports a more significant wildlife population than Williams Cove. We feel that the air and water traffic associated with logging facilities in Gilbert Bay have the potential to impact many more waterfowl, deer, bear and smaller mammals than in Williams Cove.

14 We also want to point out that the map for Alternative B shows several cutting areas which are over a mile long. We feel this is unacceptable. More leave areas of mature timber are needed to sustain wildlife values and populations.

Recreation

15 The LTF and log dump in Gilbert Bay will also diminish its recreational attractiveness for area residents. Gilbert Bay is a much more popular hunting and fishing area than Williams Cove because of its greater accessibility to the area's population centers. Gilbert Bay also offers a more secure anchorage for visiting vessels. Under "Recreation" on page 2 in the DEIS, there is a discussion of the impacts on recreation by development in Williams Cove, but we find no corresponding evaluation of the impacts on recreation by logging facilities in Gilbert Bay.

16 We question how much more impact to recreationalists the sighting of an occassional log barge in Williams Cove will have as opposed to the normal air and water traffic associated with logging in the general vicinity.

17 We request that early contact be made with the Environmental Health Section of the Department of Health and Social Services, which is the state agency charged with environmental health aspects of recreational areas.

Transportation

18 Several important information items are lacking regarding road and transportation development. The DEIS does not describe the design parameters of the proposed roads, whether or not the roads will be maintained after the first and second entries, or the intended plans for the roads upon completion of this timber sale. It is stated that two major bridges will be constructed, however, again the design parameters are not stated. It is unclear whether they will be constructed of treated or untreated timber, and whether or not they will be maintained after the timber sale is completed.

19 Given that both logging and recreation related development activities will be occurring in the area, it would be useful to know the projected impact for these activities on state-related transportation services such as the Marine Highway System.

Cultural Resources

20 The ground disturbing activities involved in the logging operations may impact significant cultural resources. There are a number of reported cultural resource sites in this largely uninvestigated area. Therefore, under provisions of 36 CFR 800 and draft 33 CFR 325.2(e), a preconstruction cultural resources survey is recommended.

Consistency of DEIS with the Alaska Coastal Management Program (ACMP)

The Office of Coastal Management (OCM) advises that the lack of sufficient justifying information and data on Alternative B may cause the State to find Alternative B inconsistent with the ACMP. If indeed Alternative B in its present format and with the current justification is selected in the FEIS as the preferred alternative, any finding of inconsistency would be based upon the following ACMP standards:

6 AAC 80.100. TIMBER HARVEST AND PROCESSING

(a) Commercial timber harvest activities in the coastal area must be conducted so as to meeting the following standards:

21 (1) the location of facilities and the layout of logging systems must be sited so as to minimize adverse environmental impacts;

12. While some cooperative studies have shown that removal of old-growth habitat does have an adverse impact on deer populations in some areas of southeast Alaska, it is related to winter survival. Our field investigations in the Gilbert Bay area attribute the present low deer population to climatic conditions of the mainland. We have revised the Wildlife section of this text which addresses this concern.

13. We agree that the Gilbert Bay area supports a more significant wildlife population than Williams Cove. However, the LUD III designation for Gilbert Bay emphasizes managing the area for a variety of uses. These LUD III areas have high use or high amenity values in conjunction with high commodity values. Allowances in calculated potential timber yield have been made to meet multiple objectives.

14. There is only one unit which is proposed for future entry that measures slightly more than a mile. The unit length when actually laid out could possibly be less than presently shown on the map. The future entry units are based strictly on photo and map interpretation.

15. The discussion on page two of the DEIS was related to the Major Issues, Concerns, and Essential Background Information section of the Introduction. Impacts on recreation in Williams Cove were identified in the Environmental Assessment (EA) as a major issue requiring further study by the EIS process. The EA addressed the development impacts on recreation by logging facilities at Gilbert Bay and further detail was provided throughout the DEIS.

16. Some recreationists may find it interesting while others may find it objectionable.

(3) timber harvest and timber management activities must be planned so as to protect streambanks and shorelines, prevent adverse impacts on fish resources and habitats, and minimize adverse impacts on wildlife resources and habitats.

(b) Commercial timber transport, storage, and processing in the coastal area must be conducted so as to meet the following standards:

(1) onshore storage of logs must be encouraged where compatible with the objectives of the Alaska Coastal Management Program;

(2) sites for in-water dumping and storage of logs must be selected and these activities conducted so as to minimize adverse effects on the marine ecosystem, minimize conflicts with recreational uses and activities, be safe from storms, and not constitute a hazard to navigation;

(3) roads for log transport and harvest area access must be planned, designed, and constructed so as to minimize mass wasting, erosion, sedimentation, and interference with drainage, and must be adequately maintained until they are returned to their pre-road natural drainage patterns (put-to-bed); and

21 (4) stream crossings, including bridges and culverts, must be kept to a minimum number, designed to withstand seasonal high water and flooding, and must provide for free passage and movement of fish. (Eff. 7/18/78, Reg. 67; am / / , Reg.)

Authority: AS 44.19.893
AS 46.40.040

6 AAC 80.130. HABITATS

(b) The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources.

(c) In addition to the standard contained in (b) of this section, the following standards apply to the management of the following habitats...

(2) estuaries must be managed so as to assure adequate water flow, natural circulation patterns, nutrients, and oxygen levels, and avoid the discharge of toxic wastes, silt, and destruction of productive habitat;

(3) wetlands and tideflats must be managed so as to assure adequate water flow, nutrients, and oxygen levels and avoid adverse effects on natural drainage patterns, the destruction of important habitat, and the discharge of toxic substances...

(7) rivers, streams, and lakes must be managed to protect natural vegetation, water quality, important fish or wildlife habitat and natural water flow.

(d) Uses and activities in the coastal area which will not conform to the standards contained in (b) and (c) of this section may be allowed by the district or appropriate state agency if the following are established:

21 (1) there is a significant public need for the proposed use or activity;

(2) there is no feasible and prudent alternative to meet the public need for the proposed use or activity which would conform to the standards contained in (b) and (c) of this section; and

(3) all feasible and prudent steps to maximize conformance with the standards contained in (b) and (c) of this section will be taken.

(e) In applying this section, districts and state agencies may use appropriate expertise, including regional programs referred to in sec. 30(b) of this chapter. (Eff. 7/18/78, Reg. 67)

Authority: AS 44.19.893
AS 46.40.040

CONCLUSIONS

In light of sections of this letter detailing the State's concerns, we are led to conclude that the Forest Service has chosen to disregard the

17. Request acknowledged, and contact will be made.

18. The road standards and specifications will be consistent with regulations and guidelines such as are formed in the Chatham Area Project Guidelines, Southeast Area Guide, the National Forest Management Act (PL-94-588). We have expanded the Effects of Implementation - Transportation section to help clarify this issue

19. It is anticipated that loggin development will have no impact on State-related transportation services such as the Marine Highwa System. However, ferry service to a lodge/resort development would b possible. The impact to the Marin Highway System would be dependent upon the intensity of development and desired modes of transportation. To project lodge/resort visitor use of this system would be purely speculative

20. A preconstruction cultural resources survey was conducted May 20-25, 1980, in the area of the Gilbert Bay/Holkham Bay Recreational Development and Independent Timber Sale for the determination of impact potential on cultural resources within that area. No impact is anticipated.

21. Alternative A is the Recommended Action and is consistent with the proposed Juneau City/Borough Coastal Zone Management Plan. The Chatham Area (Sitka) office has coordinated the planning efforts of this proposal through the USDA Forest Service Regional Office Coastal Zone Management Coordinator, to ensure consistency with the Alaska Coastal Management Program.

22 Wilderness Area. Realizing that resolution of the d-2 issue is an important aspect of many other land actions in Alaska, is it possible for this sale to be postponed until after Congress acts to resolve the d-2 lands controversy? The State of Alaska is not requesting a postponement; rather, we are asking whether such is an alternative which should be considered. Further, what might the ramifications of a postponement be.

We believe that the Forest Service should document in the FEIS whether or not it can legally delay this sale until next year when, hopefully, d-2 will be resolved.

If postponement of the sale is impossible, then the conclusion in the DEIS that there are no comparable timber alternatives generating less controversy than the Gilbert Bay area should be documented with the appropriate information, data and rationale.

Our remaining interest is the Forest Service concern that Williams Cove remain as pristine as possible. We understand the charge that LUD II areas retain their wilderness character, but, that there is also some flexibility for development. In this specific instance, the State believes road access through Williams Cove rather than through Gilbert Bay would result in significantly less impact to the area and it's resources as a whole.

RECOMMENDATIONS

Our first recommendation is that Timber Harvest Alternative A be selected and that either Recreation Alternative C or D would be acceptable to the State. In particular, selection of Alternative A would satisfy the consistency of the Forest Service's decision with the Alaska Coastal Management Program.

Short of postponing the sale and/or offering alternative timber for the independent sale requirements, we suggest that a novel approach to this sale is needed. This approach would minimize the impact on Williams Cove and its LUD II status. The absolute need for a water based camp has not been adequately demonstrated. We suggest that the log camp be located upland from Williams Cove in Value Comparison Unit (VCU) 57c, a LUD III, and out of VCU 64c, the LUD II of concern. This upland camp would utilize the planned logging roads to access the cutting area. The LTF and storage area should be located in Williams Cove. With the camp placed upland most of the detrimental effects of human habitation will not affect the Cove. The LTF could also be removed after logging ceases, and the Cove will no longer be impacted by logging activity. The Department of Environmental Conservation has indicated that the upland location of the camp should not result in any different requirements for water and sewer facilities to maintain water quality. Again we feel that access through the LUD II in this specific instance is far preferable to more significant impacts on the LUD III. 23

Implementation of this recommendation would minimize impact on the lowlands of Williams Cove which otherwise would be effected by a waterfront camp. This would also help to minimize degradation of the environmental qualities of both Gilbert Bay and Williams Cove. The only reason we presume that this option was not seriously considered is that there is little precedent for upland logging camps. We hope that you are willing to consider this innovative and unique approach.

In conclusion, the State of Alaska reiterates that we share mutual interests with the Forest Service in cooperatively developing well planned timber sales, specifically in the Gilbert Bay - Williams Cove area. At this point Alternative A appears as the most reasonable choice which we believe should be selected as the preferred Alternative. We have suggested further investigation of other lands being available for independent timber sales and raised the question of a possible postponement of the sale until after the d-2 question is settled. If the sale is to proceed as planned and Alternative B is to be selected, further justification of this decision, beyond the possibility that the land use status of Williams Cove might change in a d-2 resolution, would need to be provided in the FEIS to avoid the possibility of a determination of inconsistency with the ACMP by the State.

We would be happy to discuss our general concerns as well as any specific comments on the DEIS at your earliest convenience.

Sincerely,

Michael Whitehead
State-Federal Coordinator

cc: John Sandor, Forest Service
Diane Mayer, Forest Serivce
Bob Waldrop, Governor's Office
Frances Ulmer, DPDP, Governor's Office

22. The Forest Service has not disregarded the evidence favori
Alternative A. The Recommended Action is now Alternative A.

It would be difficult for the Forest Service to meet the committment to the SBA set-aside program should a postponement be of any great length.

The rationale for the Recommende
Action (please see Section VII, Identification of Recommended Action) documents the reasons fo
selecting Alternative A.

23. The logging camp will be located on uplands in VCU 57C, a
LUD III area. The LTF will be located in VCU 64C, a LUD II an
will remain for future entry timber harvest.

LETTER 2

Louisiana-Pacific Corporation
Ketchikan Division

Post Office Box 6600
Ketchikan, Alaska 99901, U.S.A.
Telephone: 907-225-2151
Telex: 099-55-251
Answer back: KAYPULPCO KET

May 23, 1980

U.S.D.A. Forest Service
Tongass National Forest - Chatham Area
P. O. Box 1980
Sitka, Alaska 99835

ATTN: Public Information Officer

Dear Sir,

1 The timber sale scheduled for Gilbert Bay/Holkham Bay Area should be implemented. An alternative totally developing one side of the drainage with temporary roads and large clear-cut units is needed with the goal of providing 30 million board feet minimizing the amount of road and blowdown potential. Cluttering up the drainage with numerous small openings generally requires more road and generates more unit edge available to wind throw. The temporary roads could be put to bed and not re-opened for longer periods of time.

The large wilderness areas in TLUMP necessitate difficult trade-offs on the remaining land base. To provide a sufficient timber supply the Forest Service must utilize intensified timber management on all of the available and suitable commercial forest lands.

To obtain the most cost efficient alternative using the alternatives presented, it might be desirable to combine the campsite and LTF locations of Alternative B with Alternative A's timber yield per mile of road.

Regardless of the risks and trade-offs involved, it is our opinion this timber sale should go through. The volume produced by this sale is necessary to help sustain the established manufacturing facilities.

Thank you for this opportunity to comment.

Sincerely,

Lloyd A. Jones
Administrative Forester

LAJ/gc

RESPONSE TO LETTER 2
(Louisiana-Pacific Corporatio

I. It would be more economic
go to large clearcut units an
minimize the miles of road
constructed. However, becaus
the high wildlife, fishery an
scenic values, equal emphasis
all resources must be maintai
Gilbert Valley. The small cu
unit size and distribution as
planned will achieve this goa

LETTER 3

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

May 23, 1980

USDA Forest Service
Attention: Public Information Officer
Tongass National Forest--Chatham Area
P.O. Box 1980
Sitka, Alaska 99835

Dear Sir:

We have completed our review of the Draft Environmental Impact Statement (EIS) for the Proposed Recreational Development and Independent Timber Sale, Gilbert Bay/Holkham Bay Area, Southeast Alaska. We are responding on behalf of the Public Health Service.

1 There is no discussion regarding specific sanitation facilities planned for sewage, solid waste, or drinking water for the proposed recreational development. Also, there is no reference to complying with appropriate State health and safety regulations.

2 It is stated on page 16 that adverse impacts upon native communities such as Angoon, Kate, or Hoonah are not anticipated. This statement alone is weak regarding impacts on human settlements and livelihood. What is the rationale regarding this statement? Are adverse impacts upon native populations or tourists possible, and if so, what mitigation measures are feasible? The final EIS should expound upon potential human impact.

We appreciate the opportunity of reviewing this draft statement. We would appreciate receiving a copy of the final statement when it becomes available.

Sincerely yours,

Frank S. Lisella, Ph.D.
Chief, Environmental Affairs Group
Environmental Health Services Division
Bureau of State Services

RESPONSE TO LETTER 3
(Public Health Service, Departme
of Health and Human Services)

1. All developed facilities mus
comply with Federal and State
regulations. The following laws
apply to the individual sanitati
facilities to be developed:
Sewage treatment: U.S. Public
Law, 92-500, Water standards:
Alaska Drinking Water Standards,
Alaska Statute 18 SSAC 80.010;
Solid Waste Disposal: Alaska
Statute 18 AAC 60.010.

2. Due to the moderate
development intensity and the
location of the Recommended
Action, no adverse economic
impacts or shifts in employment
are expected to occur in Native
communities. Tourism is expecte
to be enhanced by the recreation
proposals and to potentially
benefit Native communities visit
by the Alaska Marine Ferry Syste

LETTER 4

United States Department of the Interior

OFFICE OF THE SECRETARY
P. O. Box 120
Anchorage, Alaska 99510

ER-80/288

May 29, 1980

CHATHAM
MAY 30 '80

F.S.
A.O.
ENG.
F&W
PLN.

Walker

Mr. William Gee
Forest Supervisor
USDA Forest Service
Tongass National Forest-Chatham Area
P. O. Box 1980
Sitka, Alaska 99835

Dear Mr. Gee:

In response to your April 1, 1980, request we have reviewed the Draft Environmental Impact Statement for the Proposed Recreation Development and Independent Timber Sale, Gilbert Bay/Holkham Bay Area, Southeast Alaska. We offer the following comments for your consideration.

General Comments

1 The sections dealing with cultural resources might profitably be expanded and clarified. For example, on page 7 it is indicated that prehistoric use of Gilbert Bay was not evident from a 1979 survey, yet on page 16 it is said that the probability of historic and/or prehistoric cultural activity is high. It would be well to indicate the data base for the sites listed on page 7 as an indication of site density and type, i.e., are these sites known from a sample or comprehensive survey, from library/archival research? If, in fact, all potential project areas have a high cultural site potential, the proposed sample surveys should be justified as fulfilling E.O. 11593 requirements. Compliance with the requirements of Section 106 of the National Historic Preservation Act should be anticipated with a promissory statement.

2 We suggest the issues of the cultural aspects of subsistence and the Native American Religious Freedom Act also be addressed in the final statement.

3 We believe the draft statement has adequately addressed the impacts to recreation within the immediate vicinity of the project. However, there is no evidence of coordination with the Alaska Division of Parks or any indication of how the proposed recreation development might complement the Alaska marine park system. Sumdum and Taku Harbor are perhaps the nearest sites to the project being considered by the Division of Parks for marine park development.

4 No mention has been made of measures that would be required to mitigate adverse impacts on soil or water of the development of pits for fill material (p. 28-29). For example, it is stated that "The volume of rock required for construction of the resort, roads, and airfield would necessitate large openpit quarry development" (p. 25, par. 3). Only the mitigation of visual impacts appears to have been mentioned in connection with development of rock quarries (p. 29, last par.) or pits, but impacts on soils or water may also require mitigation.

Specific Comments

Page vi - Recreation Development Alternatives

5 It should be stated that alternatives F & G include the construction of airfields. Specific location should also be identified.

Page 4, Biological Factors of the Affected Environment: We strongly recommend that you develop a map on the same scale and detail as illustrated in Part 2 of the DEIS and depict the location of fish and wildlife values and habitats. This will enable reviewers and decision makers to directly compare the locations of wildlife values to the project features. For example, bald eagles and their nest trees are protected under Federal law (16 USC 668-668d) and under a

RESPONSE TO LETTER 4
(United States Department of the Interior)

1. Based on the 1979 survey of Gilbert Bay, prehistoric use is not immediately evident. This does not negate the possibility prehistoric use since existing subsistence resources are assume to have been similar throughout the past, therefore exploitation of the area in prehistoric and early historic times is highly probable.

Locating sites however, is difficult because cultural remai are often buried within or beneat a rapidly accumulating forest du layer and the ground is further obscured by very dense undergrowth. Additionally, the temperate rain forest ecosystem southeast Alaska promotes rapid disintegration of all but the mor durable cultural remains.

The sites identified are known from library/archival research ar were confirmed by on-the-ground survey methods. Refer to Appendix P.

2. No areas were identified whic would be affected by the Native American Religious Freedom Act. Insofar as the cultural aspects subsistence issues are considere there are no formally recognized areas of subsistence identified within the areas of impact.

3. Representatives from the Stat of Alaska were consulted during preliminary planning for recreational development in the study area. The State has responded to the DEIS, recommending that development of public recreation cabin at Gilber Bay and a lodge/resort at No Name Cove is acceptable (refer to Letter 1).

4. Section V, Effects of Implementation - Mitigation Measures, describes mitigation measures for the soil and water resource which pertain to the development of rock pits for fill material. All disturbed soil are with the potential of increasing stream sedimentation would be grass seeded for erosion control. In addition, reference is made to the Chatham Area Project Guidelines which specify other mitigation measures to be implemented where soil and water conditions warrant. The primary intent of the Guidelines is to

is not apparent. Likewise, important habitats for waterfowl, deer, bear, shellfish, etc., should be graphically displayed to aid in the evaluation of project impacts.

7 In several instances, the DEIS refers to biological assessments and recommendations made by the Fish and Wildlife Service. This pre-project planning information was submitted to your agency in the form of a special report, Report of Field Investigations of Proposed Timber Harvest Activities at Gilbert Bay, 1979, FWS and NMFS, Juneau, Alaska. We recommend that this report be referenced in Appendix O.

8 Page 6, 2nd paragraph: The Fish and Wildlife Service is of the opinion that the Williams Cove log transfer facility alternative presents fewer adverse biological impacts than the Gilbert Bay site. This assessment is based on the proximity of the Gilbert Bay site to sensitive waterfowl habitat on Sweetheart Flats and on the relatively low biomass and diversity in the intertidal and upper subtidal portion of Williams Cove. However, the FWS has not conducted field investigations (i.e. trawls or experimental pot sets) in the deeper waters of Williams Cove. This area could be high value habitat for deep water species of crab and shrimp. Therefore, we recommend that you modify your assessment of the deep water habitat by eliminating the statement "thereby providing little suitable habitat for most marine species."

9 Page 21, Effects of Implementing Alternatives C, D, E, F, & G: The impacts related to Soil and Water are summarized in a brief paragraph, which states that these "would have little, if any, impact on the soil and water resources" (p.21, last par.). This statement appears inconsistent with the subsequent statement that "Airfield option #1 may increase sediment levels in Gilbert Creek, as large amounts of fill and heavy construction equipment would be required" (p. 23, col. 2, par. 7). That statement referred to the construction of a 5,000-foot runway under Alternative G.

0 Page 22, Effects of Implementation--Wildlife: Low flying aircraft, approaching from the north, destined for any of the proposed recreational developments in Williams Cove would probably adversely affect waterfowl use on Sweetheart Flats. Landing approaches would probably be very similar for land or water based facilities proposed in alternative D through G. The Final Impact Statement should address these impacts, as well as possible mitigative measures (e.g. a Special Use Permit could have provisions to control flight paths during sensitive periods for wildlife).

We appreciate the opportunity to review this document.

Sincerely,

Regional Environmental Officer

5. The description of recreation alternatives F and G in the Summary have been revised to include the construction of airfields.

6. A fish and wildlife habitat retention zone has been delineated on both maps illustrating timber harvest Alternatives A and B. This area is considered to be critical fish and wildlife habitat. Maps depicting specific locations of bald eagle nest trees and other important fish and wildlife habitats are available for review in the USDA Forest Service office in Sitka. All proposed development activities have been located to minimize potential impact to the fish and wildlife resource.

7. The Report of Field Investigations of Proposed Timber Harvest Activities at Gilbert Bay, 1979, prepared by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service has been added to Appendix O.

8. Section II, Affected Environment, Biological Factors - Fish, has been revised. The statement "thereby providing litt suitable habitat for more marine species" has been deleted.

9. Section V, Effects of Implementation, Effects of Implementing Alternatives C, D, E, F, and G - Soils and Water states that primitive campsites and recreation cabin installation and associated recreational use would have little if any, impact on the soil and water resources. Construction of airfield option # may increase sediment levels in Gilbert Creek, however, the impact to the soil and water resource would be low. This is due to the potentially low level of increase sedimentation anticipated and the implementation of mitigation measures where applicable (see response 4).

10. Effects of Implementing Alternatives C, D, E, F, and G - Wildlife, has been revised to address the potential impact from low-flying aircraft.

Since the majority of aircraft servicing the recreation facilities proposed in the study area would be privately owned and operated, it would not be possibl to control flight paths during sensitive periods for wildlife.

LETTER 5

Advisory
Council On
Historic
Preservation

ADVISORY COUNCIL ON HISTORIC PRESERVATION
LAKE PLAZA SOUTH, SUITE 616
44 UNION BOULEVARD
LAKEWOOD, COLORADO 80228

1522 K Street NW.
Washington D.C.
20005

This response does not constitute
Council comment pursuant to
Section 106 of the National Historic
Preservation Act, nor Section 2(b)
of Executive Order 11593.

April 24, 1980

Mr. William P. Gee
Forest Service
Chatham Area, Tongass National Forest
Post Office Box 1980
Sitka, AK 99835

Dear Mr. Gee:

Thank you for your request of April 1, 1980, for comments on the draft environmental statement (DES) for Gilbert Bay/Holkham Bay Recreational Development and Timber Sale, Tongass National Forest, Alaska. Pursuant to Section 102 (2)(C) of the National Envorinmental Policy Act of 1969 and the Council's "Protection of Historic and Cultural Properties" regulations (36 CFR Part 800), we have determined that your DES does not contain sufficient information concerning historic and cultural resources for review purposes. Please furnish the following data indicating:

Compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f, as amended, 90 Stat. 1320).

The environmental statement must demonstrate that either of the following conditions exists:

1. No properties that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will not affect any such property. In making this determination, the Council requires:

1 --evidence that you have consulted the latest edition of the National Register (Federal Register, March 18, 1980, and its monthly supplements);

2 --evidence of an effort to ensure the identification of properties eligible for inclusion in the National Register, including evidence of contact with the State Historic Preservation Officer (SHPO), whose comments should be included in the final environmental statement (FES). The SHPO for Alaska is Mr. William S. Hanable.

3 2. Properties that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will or will not affect any such property. In cases where there will be an effect, the FES should contain evidence of compliance with Section 106 of the National Historic Preservation Act through the Council's regulations.

Should you have any questions, please call Betty J. LeFree at (303) 234-4946, an FTS number.

Sincerely yours,

Louis S. Wall
Chief, Western Division of
Project Review

RESPONSE TO LETTER 5
(Advisory Council on Historic
Preservation)

1. A literature search was conducted utilizing the Federal Register of March 18, 1980, and its monthly supplements. Refer t Appendix O.

2. In compliance with 36 CFR 800.4, the Chatham Area archeologist consulted with the State Historical Prservation Officer (S.H.P.O.) to determine whether cultural resources are within the study area. Refer to Appendix Q.

3. On sites that appear to be eligible for nomination to the National Historic Register, it wa determined that the Recommended Action will have no impact.

Explorer, Incorporated
BOX 1774
JUNEAU, ALASKA 99801

OME PORT:
LACIER BAY, ALASKA

TEL: (907) 586-1374
RADIO: WYZ 3987

CHATHAM
MAY 05'80
F.S.
A.O.
ENG
F&W
PL
RRL
PER
JT
Walker

May 1, 1980

United States Department
of Administration
Forest Service
Chatham Area, Tongass
National Forest
P.O. Box 1980
Sitka, Alaska 99835

Attn: Public Information Officer

EXPLORER

Re: Draft Environmental Impact Statement
Gilbert Bay/Holkam Bay Timber Sale

Gentlemen:

For more than ten years we have been frequent visitors into both Gilbert Bay and Tracy Arm, both on a personal pleasure basis and as a charter boat operator.

I have reviewed your draft environmental impact statement, albeit hastily, and I did not see where you have given consideration to the marine hazards at the outlet of Tracy Arm. In examining the charts you will notice a long bar which extends westward from Old Sumdum and materially narrows the exit passage. For more than half of the year this bar also obstructs large ice bergs and other ice flows that the tide carries back and forth in Tracy Arm, permitting only a few of the ice bergs to exit into Stevens Passage. The tide currents that exist here are problems to larger vessels, especially slow-moving tugs with
1 log tows. These currents sometimes cause swirls, and unless very particular attention were to be paid when logs were towed out of Tracy Arm, a major hazard would exist.

I have seen situations of this elsewhere where the hazard was not nearly as great and still log rafts were swept to one side or the other and lodged on points or shallow bars. In my opinion, this hazard is a major one and, in itself, would be reason for favoring Gilbert Bay over Williams Cove.

Should you be having a hearing and wish additional information, please let me know.

Very truly yours,

Joe McLean
Joseph A. McLean

RESPONSE TO LETTER 6
(Explorer, Incorporated)

1. The narrow channel into Trac
Arm with depths which will
accommodate tugs has been
considered and we feel confident
that passage can be maintained f
the tugs with log tows.

LETTER 7

RESPONSE FORM

Your Name, Address & Zipcode:
JIMMIE C. ROSENBRUCH
GLACIER GUIDES, INC.
P.O. BOX 66
GUSTAVUS, ALASKA 99826

5/7/80

Dear Reviewer:

YOUR RESPONSE BY JUNE 1 will be used in preparing the Final Environmental Impact Statement for the proposed recreation development and timber sale in the Gilbert Bay/Holkam Bay area. You may use this form, or you may enclose a letter inside this form. When finished with your comments, just detach this page. Fold it in half with the other side facing out. Seal the edges. And, mail it so it will arrive by June 1. This form is preaddressed, and the postage is prepaid.

Some topics you may wish to discuss with us are:

1. THE ISSUES. Please tell us which issues you consider most important to this planning process. If these issues are not adequately addressed in this statement, please identify these additional questions or concerns which the Interdisciplinary Team should consider.

1 RETENTION OF THE TRACY ARM WILDERNESS WITHOUT DEVELOPMENT OF ANY KIND.

2 "NO NAME COVE" IS ONLY TIDAL ESTUARY IN TRACY ARM AND SHOULD BE RETAINED. SMALL CRAFT ANCHORAGE IS AFFORDED IN WATER OTHERWISE TOO DEEP TO ANCHOR.

2. ALTERNATIVES AND RECOMMENDED ACTION. We would like to know your thoughts on the alternatives presented, the recommended action, and the process used to develop them. If your concerns are best met by one of the alternatives, please identify it.

→ NO ACTION (RECREATION DEVELOPMENT

3 E.I.S. CLAIMS "NO ACTION FAILS TO MEET PUBLIC EXPECTATION FOR ACCOMODATIONS AND SERVICES IN THE STUDY AREA." WHERE DID U.S.F.S. GET THIS INFORMATION?

THE PUBLIC, IN FACT, HAS EXPECTATIONS THAT THE WILDERNESS STATUS OF TRACY ARM- ENDICOTT ARM be MAINTAINED. ALT. "E" KEEPS DEVELOPMENT OUT OF NO NAME COVE

→ NO ACTION (LOGGING DEVELOPMENT)

BUT INASMUCH AS THE DECISION TO LOG HAS ALREADY BEEN MADE ALTERNATIVE "B" KEEPS DEVELOPMENT OUT OF TRACY ARM WILDERNESS.

RESPONSE TO LETTER 7
(Jimmie Rosenbruch, Glacier Guides, Incorporated)

1. All development proposed in the Recommended Action occurs in either Management Area C-10 (LUD III) or Management Area C-12 (LUD II). The Recommended Action proposes no development in Management Area C-11, the proposed Tracy Arm-Fords Terror Wilderness.

2. As described in Section V, Effect of Implementation, marina development in No Name Cove may cause impacts to the marine and estuarine habitat due to minor siltation from construction activities and potential gas and oil contamination. However, no significant long or short-term impacts are anticipated. Thus

3. The development of the Tongass Land Management Plan included extensive public involvement. As described in Appendix C, TLMP management direction for the Holkham Bay area is major emphasis toward developed recreation and destination sites for use by visitors to the nearby proposed Tracy Arm-Fords Terror Wilderness. The recreation development proposed in the Recommended Action does not affect the wilderness status of Tracy Arm and Endicott Arm.

ETTER 8

GLACIER Guides, Inc.

JIMMIE C. ROSENBRUCH, REGISTERED GUIDE, NO. 135

Glacier Guides, Inc.
P. O. Box 66
Glacier Bay, AK 99826
Phone: 907-697-3391

Winter Address:
275 West 200 South
St. George, UT 84770
Phone: 801-628-0973

May 12, 1980

USDA Forest Service
Tongass National Forest-Chatham Area
P.O. Box 1980
Sitka, Alaska 99835

ATTENTION: Public Information Officer
Re: Gilbert Bay/Holkom Bay
Development & Logging Draft E.I.S.

Dear Sir:

1 I would hope that Tracy Arm Wilderness without any development might be retained. There are fewer and fewer places one can now go where there isn't human impact of some degree or another.

2 "No Name Cove" is the only tidal estuary in Tracy Arm with shallo enough water to allow small craft anchorage and should be left alone and not developed.

3 The E.I.S claims "no action fails to meet the publics expectatio: for accommodations and services in the study area." Where was this information obtained? In my opinion the expectations of th public are that the Tracy Arm - Endicott Arm areas retain their wilderness status.

Alternative E keeps development out of "No Name Cove" and in as much as the decision has apparently already been made to log Alternative "B" keeps development out of Tracy Arm Wilderness.

Please keep me informed on any further developments. Thank you very much.

Sincerely,

Mary Ann Rosenbruch

Mary Ann Rosenbruch

● HUNTING ● FISHING ● CHARTERS ● PHOTOGRAPHY

50-FOOT TWIN TURBO DIESEL-POWERED CRUISER M/V "CHAIK"

RESPONSE TO LETTER 8
(Mary Ann Rosenbruch, Glacier Guides, Incorporated)

1. See letter 7, response 1.
2. See letter 7, response 2.
3. See letter 7, response 3.

LETTER 9

Southeast Alaska Conservation Council
BOX 1692, JUNEAU, ALASKA 99802 907-586-6942

SEACC

LYNN CANAL CONSERVATION
Haines, Alaska

JUNEAU GROUP SIERRA CLUB
Juneau, Alaska

SITKA GROUP SIERRA CLUB
Sitka, Alaska

PETERSBURG CONSERVATION SOCIETY
Petersburg, Alaska

SITKA CONSERVATION SOCIETY
Sitka, Alaska

STIKINE CONSERVATION SOCIETY
Wrangell, Alaska

TAKU CHAPTER ACS
Juneau, Alaska

TONGASS CONSERVATION SOCIETY
Ketchikan, Alaska

June 1, 1980

CHATHAM
JUN 3 '80

William P. Gee, Supervisor
Chatham Area - Tongass National Forest
USDA Forest Service
P. O. Box 1980
Sitka, Alaska 99835

RE Draft Environmental Impact Statement for the proposed timber sale and recreational development in the Gilbert Bay/Holkam Bay area.

Dear Mr. Gee:

1 Our specific comments on the Draft Environmental Impact Statement are found below. In summary, we feel the DEIS is far from adequate and the proposed actions are not advisable at this time. For the most part, it appears to us that the NEPA process has not been used as the planning tool it was intended to be, but rather as a document to justify decisions which have already been made.

2 With regards to the Williams Cove area, we feel that not having a log dump, a logging camp, or roads, as recommended in the DEIS, is the appropriate decision. These activities would definitely impair the wilderness values of the Tracy Arm-Ford's Terror area. As noted in the DEIS, the Williams Cove area has been included in the Senate Energy and Natural Resources Committee's version of the proposed Tracy Arm-Ford's Terror wilderness, and the area has also been included in the group of lands segregated for withdrawal under FLPMA since 1978. Moreover, the Tongass Land Management Plan itself designates Williams Cove and remaining parts of Holkam Bay as a LUD II roadless area. This management designation is not consistent with roads, camps and log transfer facilities.

3 Along the same lines, we feel that large-scale, highly developed recreation facilities in Holkam Bay are not consistent with maintaining the wilderness qualities of the proposed Tracy Arm-Ford's Terror wilderness and the LUD II designation of Management Unit C12. In particular, the increased volume of visitors, aircraft and motorized boats would seriously detract from the wilderness. For these and other reasons, we favor Forest Service policies which will result in small-scale, primitive recreation opportunities consistent with maintaining the wilderness qualities of the Tracy Arm-Ford's Terror area.

4 With regards to the proposed timber sale, we feel that the fish, wildlife and recreation values in Gilbert Bay far exceed the value which may be obtained from logging in the area. In particular the proposed construction of roads on steep slopes, the numerous fish stream crossings, the 10 V-notches which must be crossed, and the proposed log transfer facility cause us great concern.

5 The DEIS fails to completely and adequately portray the environmental impacts of these activities. Due to the area's use by commercial salmon and crab fishermen and recreationists including sport hunters and sport fishermen, locating a log transfer facility and logging camp in Gilbert Bay is unacceptably inconsistent with these other uses. Lastly, regardless of the problem of locating a log transfer facility, we feel that a timber sale in Gilbert Bay poses far too many threats to the qualities which are already highly valued in this area, that is, the fish, wildlife and recreation.

RESPONSE TO LETTER 9
(Southeast Alaska Conservatio
Council)

1. The NEPA process was
followed. During the fall of
1979, an environmental analys
was completed and documented
Environmental Assessment (EA)
dated October, 1979. Public
participation which is requir
both by NEPA and the Natioanl
Forest Management Act (NFMA)
encouraged and a number of pu
and inter-agency (both Federa
State agencies) meetings were
held. Decisions were not made
prior to receiving public, St
of Alaska, other Federal Agen
and interest groups' opinions,
desires and recommendations w
were expressed and made known
the Forest Service during the
environmental analysis proces
The Environmetnal Assessment
pointed out the need for a fu
Environmental Impact Statemen
process with expanded public
participation. The projects
proposed in the Gilbert
Bay-Williams Cove areas were
proposed in the Tongass Land
Management Plan (see Part 2,
FEIS, page 22, C-10). This F
is a continuation of that lan
management plan and fully com
with both NEPA and NFMA. No
decisions were made or finali
until completion of this docu

2. No roads would be visible
the proposed Tracy Arm-Fords
Terror Wilderness. The log
transfer facility and camp wou
be behind a 2,147 foot high ri
and could only be viewed from
distance of about three miles
across saltwater from a small
portion of Tracy Arm. Tugs wi
log tows would be visible for
short periods of time as they
their way from Williams Cove
through Holkham Bay.

Road development is permitted
LUD II areas (see TLMP map) whe
conditions are such that prote
of sensitive areas of the fore
would be involved and road
development could be placed in
LUD II in order to afford this
protection rather than in an a
where identified environmental
values are significantly higher

As noted in the DEIS, little public support exists for the proposed timber sale in Gilbert Bay and the proposed recreation developments in Holkam Bay. In light of not being able to find an acceptable location for a log transfer facility we urge you to cancel these current proposals and provide timber for logging from an entirely different area.

On pages four thru nine, the DEIS reveals that Forest Service planners overwhelmingly agreed that the Gilbert Bay area was extremely valuable for its fish, wildlife, recreation and wilderness values. These planners rated the wildlife values as very high (5 on a scale of 1 to 5), the fish values high (4 for commercial fisheries and 3 for sport fisheries), and the Gilbert Bay estuary high (4). In addition, the planners recognized the high value of 6 Gilbert Bay for wilderness and recreation, and as revealed on page 9 of the DEIS the Recreation Resource Value Ratings for Gilbert Bay were consistently higher than for the No Name Cove/Williams Cove area. In contrast, the timber in the Gilbert Bay area was rated only average (3 on a scale of 1 to 5). The DEIS fails to explain the Forest Service's reasoning for logging and roading this area which it knows has fish, wildlife and other values which far exceed the value of the area's timber resources.

Logging and roading the Gilbert Bay area, is particularly inappropriate in light of the inadequacy of the information presented in the DEIS. Some of this inadequacy is acknowledged in the DEIS itself. On page 4, for example, the DEIS states, "No quantitative water quality data is available and the range of natural sediment levels is unknown." And an page 18, the DEIS acknowledges that the impacts of logging on populations of marten which use old-growth forest, is unknown.

For the most part, however, the DEIS simply fails to acknowledge the inadequacy of the information. On page 5, for example, the DEIS states that three endangered avian species *may* migrate through the area, but fails to provide definitive information.

On pages 18 and 19, the DEIS states that "Logging and roading generally cause no significant long-term impacts to fish habitat and populations." This statement cannot be supported with factual evidence--long-term studies of the subtle impacts of logging and roading have 8 not been conclusive, but they do indicate that increased transpiration of young growth timber stands can result in reduced streamflow, and that young second-growth stands of timber provide fewer nutrients to support stream productivity than in old-growth forests.

The DEIS's statement on page 18, "No impacts to waterfowl habitat would occur.", is a similarly unsupportable statement. No studies have been conducted and information is simply not available on the impacts of 9 logging, roading and other human activities on waterfowl. It is reasonable to assume, however, that waterfowl will be disturbed by noise and near-by activity, and that their food sources may also be impacted by logging and roading.

The statement on page 18, "No significant impacts to bald eagles will occur.", is contrary to recent U. S. Fish and Wildlife Service findings. In a published report the Fish and Wildlife Service has stated that the existing 0 330 foot buffer zone provided on national forest lands around eagle nest trees is inadequate to protect eagle populations--they argue that a continuous leave strip needs to be maintained in coastal areas inhabitated by bald eagles.

The DEIS fails to adequately explain how the Forest Service will comply with the recently promulgated NFMA regulations. For example, 36 CFR Part 219.13 (e) calls for special attention to be given to the land and vegetation for 100 feet from all streams, lakes and other perennial bodies of water. On page 29, the DEIS does say that stream-1 side buffer strips will be established on all major salmon spawning streams, but the DEIS fails to inform the reader as to where these buffer strips will be located and how wide they will be. In reviewing Part 2 of the DEIS, the maps

3. The greater part of the 678,00 acre proposed Tracy Arm-Fords Terror Wilderness will be unaffected by the anticipated increase in water traffic in Tracy and Endicott Arms and Fords Terror. The primitive character and absolute solitude of a vast majority of the area between Tracy and Endicott Arms will remain unchanged, in fact, few visitors are expected to actually leave the water and set foot in the proposed wilderness area. The numbers of skilled mountain climbers and alpine hikers who have the ability to safely enter rugged glacier and mountainous terrain which is characteristic of the area, is not expected to increase dramatically as a result of the development of lodge-resort facility in Williams or No Name Cove.

4. The Forest Service as well as many others share your concerns an do recognize the high fishery, wildlife and recreation values of Gilbert Bay. Present day forest management practices on the Tongas are designed to recognize and provide for these values. Proper and timely sale administration by Forest Service officers will be carried out in full compliance wit the plan described in the FEIS.

5. No log transfer site will be located in Gilbert Bay. Timber harvest, road construction, and other related activities will not pose unacceptable impacts to wildlife, fishery, and recreationa resource values of Gilbert Bay and Gilbert Valley. There is, in fact a considerable amount of public support for maintaining the economic stability of those communities with substantial portions of their economy based or utilization of forest products suc as commercial recreation endeavors and timber harvest. This proposal is intended to support those communities and the people associated with the recreation and timber harvest industries, as well as benefit the overall public. Th log transfer facility site propose in Williams Cove has been identified as an acceptable location.

6. It is true that fish, wildlife and recreation values are high in Gilbert Bay and Gilbert Valley and are recognized in the "Affected Environment" section of the FEIS. However, the high wilderness value and national prominance of the are

spawning streams. the DEIS, then, fails to assure the reader that the regulations are being followed and that there will be adequate streamside protection.

12 The DEIS inaccurately portrays the impacts of following the No Action alternative. On page 16, the DEIS states that to do so would reduce timber industry employment. These statements are inaccurate and misleading. In fact, the Forest Service could offer timber sales in areas other than Gilbert Bay to reach TLMP's 1980 logging and timber industry employment goals. The consideration of alternative areas in the DEIS was inadequate.

13 Furthermore, the argument made on page 31 of the DEIS that the No Action alternative would contradict TLMP is also inaccurate and misleading. Part 2 of the TLMP, which provides so-called management direction, was never made available for public review, comment and input prior to it being adopted, and as such lacks acceptability. Moreover, many areas in the Chatham Area other than VCU 57 have the same managment direction, and the Forest Service is not saying that to not log these areas will violate TLMP. In our view, TLMP may allow an area to be logged, but like many of the other LUD III and IV areas in the Tongass National Forest, does not commit every area for logging, and allows for prioritization which will result in logging the least environmentally sensitive areas first.

14 The DEIS also fails to disclose the environmental impact of in-water storage and transportation of logs. While it does mention some direct benthic and toxicity impacts, it ignores the fact that in-water storage and transportation leads to a loss of wood fiber, both through the digestion of fiber by marine organisms and lost logs resulting from raft break-up. The loss of wood fiber means that less volume is available for each acre of land logged, resulting in increased logging and roading to obtain any given level of volume. Lastly, due to the salts which enter the logs stored and transported in the water, air pollution problems at pulp mills are significantly increased. We urge you to require dry-land storage and barging of logs for all timber sales on Tongass National Forest lands.

Thank you for this opportunity to comment.

Sincerely,

Sudie Burnham

Sudie Burnham, Chairperson
Juneau Group-Sierra Club

Leonard Steinberg

Leonard Steinberg, Executive Director
Southeast Alaska Conservation Council

cc: Max Peterson
John Sandor

The wilderness resource of Gilbert Valley was evaluated in TLMP and the subsequent allocation placed Gilbert Bay and Gilbert Valley in a non-wilderness category.

7. We point out that the statement preceding "No quantitative water . . ." states that the observed water quality throughout the study area is good, and is similar to other non-glacial streams in southeast Alaska. There are numerous parameters with respect to a wide variety of natural conditions in the Alaskan environment yet to be defined. Definitive information is being gathered and management practices are being improved every year as we learn more about the environment including bird migrations, wildlife population fluctuations, and the range of natural sediment level increases and decreases in glacial and non-glacial rivers and streams. When designing and implementing projects, the Forest Service builds in adequate safeguards for any impacted resource values. Recent timber harvest operations of which Kennel Creek (Chichagof Island) is one example, have illustrated the innovative and constantly improving forest management practices developed and implemented by the Forest Service relative to maintaining high scenic, soil and water quality, and fishery and wildlife values.

8. Design, location and construction of roading systems and the location of harvest units to facilitate the logging of timber is carefully planned to place the least amount of impact to the fishery resource and to fish habitat. No logging debris is allowed to remain in any stream designated for complete protection. It is anticipated that there will be no significant long-term impacts to fish habitat or fish populations by logging or logging related activities.

9. No harvest units, road construction, or timber harvest related activities will occur in the waterfowl habitat areas of Gilbert Bay or Gilbert Valley. There will be no disturbance to waterfowl habitat caused by the proposed harvest of timber. However, some short-term disturbance to waterfowl is anticipated from the sounds or movement of logging vehicles and workers located a mile or more from the identified waterfowl habitat.

10. Leave areas along the beach, where the majority of eagle nests are found, are planned and will be maintained in this logging proposal, thereby providing full protection to the eagle nesting habitat. This is in accordance with the memorandum of agreement between the Forest Service and the Fish and Wildlife Service.

11. Special attention will be given to riparian vegetation. Biologists will assess all buffer strips and will recommend suitable widths of retainable vegetation. The maps in part 2 did not intend to imply that areas along streams would be denuded of all vegetation. It is not possible to show the widths of buffer strips that will be left at this map scale. During the map printing process, cutting units were inadvertently displayed as straddling some streams. Cutting units 25 and 30 (Alternative A and B) are two examples. Neither of these cutting units will cross these streams and biologists will assess a suitable buffer width to be retained for resource protection.

12. The statements do not say that timber industry employment would be reduced by a No Action alternative. The statements imply that some full-time jobs would probably become part-time employment. Elimination of jobs was not implied, rather a decreased amount of work available and a subsequent reduction of 32 positions from full-time to part-time would most likely occur.

Alternative areas for timber harvest were addressed and the allocations (LUD's) were made in the TLMP process. Therefore, there is no need to address these issues in this statement.

13. The statement that a No Action alternative would fail to comply with TLMP management direction is valid. The long and difficult allocation process of TLMP was accomplished with a tremendous amount of public, interest groups, State and other Federal agencies, and industry involvement. The recreational development in C-12 and timber harvest planned for C-10 were decisions made during the TLMP planning process.

14. Log raft breakup and loss of fiber and quality are a concern of the Forest Service and the Forest Products Industry. The value of the losses is borne by the industry involved such as payment to the U.S. Treasury for loss of logs. Forest Service acknowledges that the losses are converted into extra acres being harvested to supply the existing market.

Specific dry land storage sites are examined during timber sale preparation and economic and environmental analyses are made. Where it is environmentally and economically more sound to develop an upland log storage area and to ship logs on barges, these decisions are recommended in the sale proposal. This concern was addressed in the Environmental Assessment.

LETTER 10

Windham Bay Independent Company

Box 915, Juneau, 99802

r. William Gee
Forest Supervisor, Chatham Area
Box 1980
Sitka, Alaska 99835

May 30, 1980

Dear Mr. Gee,

these are my comments regarding the proposed ndependent timber sale in Gilbert Bay - Williams Cove and the level of recreational activity in Endicott-Tracy Arm

Gilbert Bay is heavily used by recreationists, sport and commercial fishermen. It is also one of the few adjacent anchorages to Juneau and Stephen's Passage. As part of the Snettisham System, this large drainage supplies all of Juneau's power, has a 60 million egg hatchery under construction and active mineral claims worked by the Placid Oil Co. helicopter and cre

On P.46 of the DEIS, leaflet #97, under
"Management Direction/Emphesis" these qualities
1 are understated, as if these activities are typical
of many systems in S.E. Alaska. they are not.

there is already a very high contribution
by the snettisham system, and should satisfy
any multiple use designs that the Forest Service has
2 there. Multiple Use does not mean that all activities
must occur, yet by the addition of timber harvest
to this system, this seems to be the interpretation
and objective.

Consequently, I disagree with many of the assumptions and premises on which the proposed timber sale and recreational development are based

RESPONSE TO LETTER 10
(Windham Bay Independent
Company)

1. As displayed in part two
"Tongass Land Management Pla
published in March, 1979, th
"Management Direction/Emphas
section for each of the Tong
National Forest's 141 Manage
Areas were meant to briefly
describe the management acti
planned or likely to occur f
area within the 10-year life
plan. It was not intended t
these brief descriptions of
potential and planned forest
management activities would
an evaluation or description
resource values. Whenever m
projects are planned and pro
for implementation, resource
are addressed in Environment
Assessments (EA's) or Enviro
Impact Statements (EIS), in
compliance with National
Environmental Protection Act
requirements and regulations

2. This Recommended Action
combines a proposed timber s
development of a commercial
lodge/resort facility (shoul
financial interest decide to
invest) and public recreatio
cabin, was not intended to f
all possible multiple use
objectives of the National F
The production of the Snetti
hatchery has been recognized
however, the Forest Service
not consider this as one mor
in trying to reach an object
"full multiple use." The Fo
Service does have a committm
provide timber for harvest t
Small Business Set-Aside pro
of which this proposal is a
Irregardless of the program,
Gilbert Valley has been allo
in TLMP for commodity develo

3. We understand your disagreement with a developed lodge/resort in Tracy Arm while providing competition to your business. The lodge complex and resultant motorized vessel activity will be a distraction to some. However, requests for overnight accommodations as well as support developments required by boaters have

Recreation is increasing in Endicott Tracy without any amenities. There is no reason to encourage visitor use, as the 'experience' is being actively promoted by the tour ships, state ferry system, travel agents and myself, Grizzly Bear Tours, which leads 5 Day Kayak trips through the fiords. 3

Motorized vessels can be a major distractic to both wildlife and Kayakers. thus a moderate or large lodge facility runs contrary to the better ways of visiting this wilderness area.

I disagree with the statement on P. 16 of the DEIS, under the "effects of implementing a no action alternative". Wilderness can rarely be enhanced and visitor use is already actively encouraged.

Under both the Timber and Recreation options I must reccomend No action being taken.

I believe that Williams and No-name coves should remain within wilderness designations and that no cabins or resorts should be built in the area. At most, backpacker campgrounds (wooden platforms may be placed in a few designated coves.

I also feel that many statements in the DEIS are inaccurate, especially the last paragraph, left column, P. 58, beginning with "Another facet. I contend that none of the mills refered to are independent and are not qualified to bid in these SBA sales. I have enclosed my testimony before the SBA timber program hearings of March 26, 1980. Please consider this testimony and my letter to Ken Mitchell of Jan. 31 as integral parts of this statement.

Thank You,

Theodore P. Thoma

T. P. Thoma

Box 915, Juneau, 99802
Grizzly Bear Tours
Windham Bay Lodge

been made (see Appendix B, Resolution of the City anc Borough of Juneau, Alaska) Additionally, during the formulation of the Tongass Land Management Plan (Fina Environmental Impact Statement filed March, 1979), comments were received recommending establishment of a marina and recreation use site ir Management Area C-12. Demand for developed recreational accommodatior has been increasing. With the recent limitation plac on the number of tour ship allowed to enter Glacier Bay, it is expected that some of this use will shif to areas such as Tracy Arm/Endicott Arm.

Therefore, we feel that it is necessary to provide th opportunity for developmer of a commercial recreatior accommodation adjacent to the Tracy Arm/Endicott Arm area.

4. This statement was not intended to imply that wilderness can be enhancec rather, it infers that the opportunity to enjoy the wilderness experience woul be increased or enhanced f a number of people when a recreational development w placed in this area; otherwise, people would nc have this opportunity (No Action Alternative).

5. Williams and No Name Coves are not now within a wilderness designation, nc are they in the Administration's proposal for classification into th National Wilderness Preservation System. The Tongass Land Management Pl has designated the area LL II and provides for recreational development i this area (see TLMP, Part

6. The statements made ir this paragraph are accurate. Those communiti listed do in fact, have sawmills which are operate by independent operators.

7. Thank you for enclosir a copy of your March 26, 1980, testimony. That statement and your January 31, 1980, letter to Ken Mitchell are a part of the permanent public response record of this proposal.

Chip Thomas
Grizzly Bear Tours
#2 Merchants Wharf
Juneau, 99802
3/26/80

DALE Heigh
Director, Timber Management
USDA Forest service, Tongass
Box 1628
Juneau, Alaska 99802

Testimony on SBA-USDA set-aside sales.

My name is Chip Thomas — I am sole owner of the Windham Bay Lodge and Grizzly Bear Tours, a Kayak-wilderness touring company here in Northern S.E. Alaska. I also had the opportunity in 1969 and 1970 to work in a red cedar shingle mill on the Olympic Peninsula — as a weaver and packer. As I consider this mill experience to be one of the best in my life, I have no prejudice concerning small loggers or mill owners.

The SBA-USDA set aside program in S.E. Alaska was designed for small mill owners, specifically those small operators that are traditionally precluded from high yield timber areas by the long term contract corporations. this 3 year agreement was designed especially for Ketchikan, where there are far more small mill operators than any other district in the Tongass National Forest.

I had the opportunity last week to read that 1977 file of testimony ~~which~~ instigated this program; the most persuasive and local submittal was by the small Loggers and lumbermen association, particularly the Herring Bay Lumber mill, of Ketchikan. this association was made for the best of reasons, yet this mill has not been a successful bidder, nor is the association still together

A review of the 1977 through 79 sales shows that 170 mmbf were offered, 156 bid upon, with 75% (or 120 mmbf) going to Alaska Timber of Klawock. The other sales were awarded to Eugene Graf (15 mmbf) Schnabel Timber (14) Mitkof of Petersburg (4.5) and Reid (4.3)

My concerns are twofold: First, these SBA sales are outside of the 50 year contract areas, and secondly, that these winning bidders are not autonomous from the 2 large pulp corporations.

To elaborate— the majority of timber let has been on Kupreanof Island, the Chilkat Peninsula and lesser amounts on Prince of Wales. However, the expressed area of need is for small Ketchikan mills, while the majority of this timber has been cut into cants for export from the Klawock and Haines mills.

Even though there is no prohibition on exported cants, the implied use of these sales was to provide both plane and rough lumber for domestic use; and this has not occurred. The concentration of cant sales on Kupreanof may be satisfactory to the forest managers and pulp owners because it does not interfere with their areas, but it has surely affected the village of Kake and prevented them from a Hamis River Selection. Kake will now harvest N.E. of the village, a far inferior selection

I bought 28,000 from Mitkov in 1975 — at $200/1000

The obvious areas left in northern S.E. are few and far between — primarily the mainland bays, such as Gilbert and Windham. There just isn't any other option in a district where the only stands of available timber are important wilderness selections or steep, mainland drainages that have high values for commercial and sport fishermen, Yet 30 mmbf (or 40% of the SBA program in the Tongass) is expected to come from the northern area. That seems a bit unlikely when there are so few bays left that are not native selections, wilderness 50 year contract areas, or recreational areas, such as Windham Bay - Chuck River.

My second concern is the management autonomy of these mills — it has been confirmed to me, over and over again, and by Forest Service personell also, that Alaska Timber Corporation, Schnabel Lumber and Mitkov have had extensive financial dealings with the 2 pulp corporations; to the extent that Schnabel has borrowed considerable sums, (nearly 3 million dollars, from ALP) Alaska Timber borrowed heavily from Georgia Pacific - LPK, and Mitkov from ALP. As you also are aware, anti trust suits filed in 1975 are still in limbo in Portland al Seattle, filed on the anti-competitive practices of the large mills to drive smaller loggers and mills from the Tongass.

If any of these circumstances are correct, these SBA-approved small mills do not have management autonomy and are actually part of the KPC - ALP network. I hope this isn't the case, but in my heart I know it is.

Since none of these mills are using these SBA set aside sales to cut plane or rough lumber, the implied reason for these sales is not being fulfilled. A mill cutting cants for export to Japan is not a small S.E. Alaskan timber mill. It is a mill working for unknown foreign concerns in a monopoly market situation; where the investment and transportation are controlled by foreign investors.

My last comments this morning have to do with the level of Forest Service planning I've come to know and expect;

the timber cruise methods of 1955 were so faulty as to result in high overestimates of what lay in the 50 year contract areas and contingencies. Consequently the large loggers and U.S. Foresters have engaged in overharvest and rescheduling of contingencies that has no logic when added to recent native withdrawals, wilderness, TLUMP considerations and the so called small business set aside program.

(Overestimate, Overharvest / no fish or wildlife.)

Yet the Forest Service has insisted that public and private harvest levels be kept seperate; a planning effort such as TLUMP has no lasting value in light of new additions to resource withdrawal. There has been little to no consideration of total impact and ramifications on individual districts, such as the Chatham.

–(Deception of Congress and Admininistration)–

I make the observation that the real small businessmen of Alaska have been ignored in these new allocations – the fisherman, tourist and recreationist. All us "smalltimers" that make $100,000 a year. Additionally, over 400,000 U.S. citizens yearly may soon be using all the Tongass Forest resources. It is time that these small businessmen were considered when carving up the best forest in the United States.

Recommendations:

1. that the SBA-USDA timber set aside program be reduced to 30 mmbf a year

2. that the set aside areas be confined only to the Ketchikan District, since the Stikine has been thoroughly impacted ad the Chatham does not have the volume to satisfy all users.

3. that the federal and state governments should seriously pursue "buying-out" Alaska Lumber and Pulp, the Japanese-owned firm based in Wrangall and Sitka. Suggested buy-out price would be $500 million

   At the very least, the last 15 years of the contract must be bought up to prevent the siege on the forest that is now taking place. that gives 10 years to plan such a buy-out program.

4. Last, that the Forest Service purge itself of managers and planners that purposely, with malice, confuse and mislead the public on forestry management issues. Example — strict district seperation of information.

   (Travel to Sitka for Stephens Passage info — 400 + employees in Juneau)

LETTER 11

JOHN R. SWANSON
P. O. Box 922
Berkeley, California 94701

May 27, 1980.

Mr. William P. Dee, Forest Supervisor,
Chatham Area - Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835.

Dear Mr. Dee:

Please accept my Comments as follows, concerning the Proposed Recreational Development and Independent Timber Sale - Gilbert Bay / Holkham Bay area - Draft Environmental Impact Statement.

This Proposal if implemented, will mean substantial destruction to this particular area's wilderness, scenic, wildlife, fish and botanic resources. and to a lesser degree, its cultural resources. With the assumption that this specific area does contain wilderness, scenic, fish and wildlife resources of certain national significance and the greater area of international importance.

Logging in this area will decimate the commercial and sport fisheries with the fish resources much more important as an economic resource than the timber resource on a long-term and, certainly, on a permanent basis in this area, and in the entire portion of Southeast Alaska.

With the unique wilderness resources, along with the scenic and wildlife resources, deserving full and lasting protection as such resources are fast becoming extinct not only in this nation but in the entire world.

Also the proposed recreational developments will injure the land and water resources due to the fragile nature of this area. and will conspicuously intrude upon the general natural atmosphere of this still pristine land.

Relative to my opposition to this Draft Proposal, I strongly urge that the following provisions be adopted and implemented;

- Establishment of the Port Snettisham Wilderness to include about 235,000 acres.
- To provide a special study of all flora and fauna in this area so that such resources may be more adequately understood and protected.
- Identify this area with its outstanding natural features as an important part of my proposal of nearly thirty years ago to establish a Four Country International Park, to include the area from the Pierce-Portland Canals to the Chilkoot Pass. With the Boundary Ranges, Spectrum Range, Atlin Lake and environs as part of this Park complex. To total some 16 to 20 Million acres. One of the world's outstanding Park areas.

Sincerely,

John R. Swanson.

RESPONSE TO LETTER 11
(John Swanson)

1. The proposed logging in Gilbert Valley will not cause "substantial destruction" to those resource values you have listed. The proposed 678,000 acre Tracy Arm-Fords Terror Wilderness is across Tracy Arm, a distance of approximately three miles from the closest on-shore logging activities. However, tugs towing log rafts will pass within approximately one mile from the mainland portion of the proposed Wilderness and one-half mile from Harbor Island. In addition, a 2,147 foot ridge blocks the view of the logging area and log transfer facility from nearly all of the proposed wilderness. The log transfer facility, of course, will be visible to air travelers along Tracy Arm. Also some travelers aboard ships may view the logging activities, however, it will be from a distance, across salt water, and no closer than 2 1/2 to 3 miles.

Wildlife, fish, botanic and cultural resources will be protected. These protective measures are described in the FEIS and in the Chatham Area Project Guidelines, which are specific Forest Management activity guidelines. A copy of the guidelines is available upon request.

2. The log transfer facility in Williams Cove and resultant log rafting through Holkham Bay have been selected so that the more environmentally sensitive Gilbert Bay-Port Snettisham area, where commercial fishery activities are considerably more intense, will not be disturbed or affected by these activities.

Logging activities on land, specifically location of harvest units; road location and design; and stream crossings (bridge design and construction) are all planned so that minimal adverse environmental impacts will occur. Sediment introduction to streams, surface runoff, or ground water systems due to accelerated soil erosion (man caused) will be kept to a minimum by the utilization o best management practices. A cop of the guidelines insuring implementation of best management practices is available upon request.

3. More than 50% (8,146,000 of the Tongass National Forests 15,189,193 acres) of the Tongass National Forest has been given full resource protection through the LUD II (see TLMP FEIS) and LU I (areas proposed for inclusion into the National wilderness preservation system) land allocation process.

Approximately 1,100 acres will be affected by the timber harvest activities; associated road construction; log transfer facility; and logging camps location, within the 18,000 acre total land base of the Gilbert Ba area. Approximately two acres ar within the LUD II (road construction to the LTF), the remainder being in the LUD III area.

4. There will be an impact to th local area where a recreational development is constructed. This impact has been judged acceptable in light of the benefit of providing a means for many people to have the opportunity to conveniently visit the proposed Tracy Arm-Fords Terror Wilderness and enjoy its tremendous scenic values. Should a recreational development not be located here, significantly fewer numbers of people would have the opportunity to enjoy the natural wonders this area offers.

5. Current project plans on the Chatham Area (of which this proposal is a part) do include studies of flora and fauna that require protection. This information can be obtained upon request. Should 16 to 20 million acres of the area between Portlan Canal and Chilkoot Pass be designated a park with a preclusi of commodity resource utilization a number of communities including Haines, Sitka, Skagway, Wrangell, Ketchikan, and Petersburg would suffer economic hardships. A lar part of the economic structure of these communities is based on utilization of resources obtained from the National Forest. These resources would be unobtainable under a park designation.

LETTER 12

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

CHATHAM

REPLY TO ATTN OF: M/S 443

MAY 30 1980

William P. Gee, Forest Supervisor
Chatham Area, Tongass National Forest
P. O. Box 1980
Sitka, Alaska 99835

Dear Mr. Gee:

1 The Environmental Protection Agency (EPA) has completed its review of the Draft Environmental Impact Statement for the Proposed Recreational Development and Independent Timber Sale in the Gilbert Bay/Holkham Bay Area. We are concerned over several issues in the impact statement and have reservations regarding the environmental impacts of the recommended actions. Our main concerns are: 1) while the status of the proposed Tracy Arm-Fords Terror Wilderness area is still in question, the Forest Service is attempting to anticipate legislation by proposing alternative actions that may or may not be feasible, 2) the recommended action for the recreational development is not analyzed in the statement, 3) the timber sale alternatives do not include alternative sites for development, and 4) alternatives are proposed that violate conditions of the Land Use Designation-II. Our comments and recommendations will address the timber sale and recreational development separately with a rating based on the statement as a whole.

PROPOSED TIMBER SALE

2 EPA believes that the alternatives presented do not provide an adequate choice among potentially feasible alternatives. Among the three alternatives provided, one represents no action, alternative A is inconsistent with Senate Bill HR-39 and the LUD-II, leaving alternative B as the only development alternative. EPA suggests that the Forest Service analyze alternatives describing timber development in two or three areas other than Gilbert Bay, so that a more meaningful comparison and choice is provided.

3 Based on the information provided in the DEIS, EPA questions the desirability of harvesting timber in the Gilbert Bay Area. The U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Agriculture, Forest Service, several other agencies, and the public have all identified the Gilbert Bay area as being an important salmon and crab rearing, spawning, and harvest area. The Juneau Coastal Zone Management Plan has identified the Sweetheart Flats as "an area which merits special attention due to its recreation, wildlife and fisheries value, which have all been rated by the TLMP as as having high to very high value." Gilbert Bay is also a major staging and molting area for waterfowl. In contrast, the TLMP rated the timber value of this area as average.

WATER QUALITY AND SOIL PRODUCTIVITY

4 We note that a soil inventory report containing soil suitability and capability maps is available but is not provided in the statement. A summary of the report indicating areas with low soil stability should be included, preferrably contained on the map for each alternative. As is, it is not possible to accurately determine the risks associated with disturbance activities.

5 On page 16, the statement is made that "no significant long-term impacts to the soil resource are anticipated." We suggest that "significant" be assigned a quantitative value in order to better define its meaning. For example, a significant change may occur when the soil is degraded by a certain percentage.

RESPONSE TO LETTER 12
(U.S. Environmental Protection Agency)

1. The current 204 (b)(1) FLPMA segregation order, which expires December 5th this year, and the subsequent USDA Environmental Assessment Report (dated November 28, 1978) providing additional protection for these National Forest lands in the Williams Cove and No Name Cove areas, prohibits developmental activities of this nature. These executive orders were intended to provide protection to this area for the period of time necessary for Congress to consider the proposed legislation. Due to the expiration of the FLPMA segregation order on December 5, 1980, the Recommended Action proposed in the DEIS has been revised to include a log transfer facility with road access at Williams Cove. The development of these facilities and a lodge/resort would be consistent with LUD II management direction under the Tongass Land Management Plan.

The Recommended Action for the recreational development is a synthesis of Alternatives C and D and the analysis of potential environmental impacts from implementation of these alternatives is described in Effects of Implementation. Mitigating measures for any adverse environmental impacts occurring from proposed development are also analyzed and described in this section under Mitigation Measures and Management Requirements. Section VI, Evaluation of Alternatives, also provides an analysis of the Recommended Action recreation component.

Alternative developmental sites for timber harvest were not proposed in this EIS as this was accomplished during the TLMP planning process (1976-1979). TLMP allocated Gilbert Bay Valley (VCU 57/ LUD III) for timber harvest and the Williams Cove - No Name Cove area (VCU 64/LUD II) to recreational development.

Permitted activities for each Land Use Designation are illustrated in the Tongass Land Management Plan, FEIS, published March 12, 1979. This document is available upon request. LUD II areas do allow recreational development proposals and "vital forest transportation system linkages". The IDT considers the road access to a log transfer facility in Williams Cove

6 information that is provided indicates that the possibility of adverse effects on water quality and ultimately fisheries are high. Over half of the stream reaches are rated poor or fair indicating inherent streambank instability. We note that "shallow mass wasting of soil and rock fragments is a common natural erosion process." Flow velocities which approach ten feet per second would then make any streambank disturbance extremely hazardous. Alternative B would require 21 miles of road with two miles being "adverse." This section of road should be identified on the maps and the environmental implications of "adverse" should be explained. The DEIS maintains that special measures will be prescribed. Without stating what those special measures are, we cannot agree that "no significant long-term impacts will occur."

The above, and other statements such as "any impacts which would occur would be within the range of natural water quality variability" should be substantiated by citing monitoring data or other research. Blanket statements alluding to adequate protection without quantification should be avoided.

7 We agree that the greatest potential for failures occurs on slopes greater than 65%. Mass wasting usually occurs three to five years after harvesting as tree roots begin to decay. We note that 750 acres of sideslopes of 25-75 percent are planned for harvest. How many acres will be between the 65-75 percent slope class?

8 Between eight and nine significant V-notch road crossings are planned with two major bridges, one approximately 110 feet long. Proper road design is essential but we question whether any special measures can adequately alleviate significant impacts resulting from construction. In addition to soil disturbance, where and what measures will be taken to reduce the visual impacts of the bridges?

9 We do believe that the Forest Service has made an effort to stay out of the areas meriting special attention, has established a wildlife habitat retention zone, and does not plan on logging on slopes greater than 75%. However, harvesting in an almost continuous pattern directly adjacent to the bay and crossing unstable streambanks and soils with logging roads can still significantly affect wildlife and waterfowl due to disturbance and fisheries due to sedimentation in an area highly susceptible to disturbance.

RIPARIAN ZONES

0 Several clearcut units in both alternatives are crossed by major streams. It is stated that susceptible streams will be protected through retention of streamside vegetation. The mitigation measures to be taken should be presented in more detail. What will be the widths of buffer strips? Will logging equipment be excluded from streams? What are the tradeoffs between blowdown and buffer strips?

WILDLIFE

11 We agree that harvesting operations cannot be accomplished without impacts to wildlife habitat. Deer and marten will be displaced, potential bear - human encounters will increase, noise will impact birds and other waterfowl, and hunting pressure may alter long-term wildlife residence patterns. The continuous road network around the estuary can also substantially hinder movement of species between the estuary and the uplands. We also note that the proposed logging camp is located within the fish and wildlife habitat retention zone. The increased human activity from both logging after several entries and from recreation due to the proposed development in Holkham Bay can significantly decrease the value of wildlife in the Gilbery Bay area and in the adjacent proposed wilderness area.

FISHERIES

12 At present the Gilbert Bay area is heavily used for commercial fishing. Short-term impacts from sedimentation caused by roading during the proposed and future entries can potentially impact eggs and fry. Due to the lack of information provided on soil stability, mitigation measures, and impacts from the log transfer sites, it is difficult to agree that significant adverse impacts will not occur. Compatibility between land disturbing activities and soil and water protection should not be assumed without reasonable proof where values dependent on soil and water protection are very high. Is "average" value timber worth the degradation of the high value wildlife, fisheries, visual, and water quality which make the area attractive for recreation and aesthetic enjoyment?

Because of the lack of sufficient information regarding mitigation measures, the high values assigned to the other resources, the "average" value of timber, and the lack of alternative harvesting sites, EPA favors the no action alternative.

(LUD II) a vital transportation linkage due to the resulting protection afforded to the sensitive and valued marine environment at Gilbert Bay.

2. Gilbert Bay is one of the Chatham Area's 54 VCUs allocated t LUD III and is available for timbe harvest within the Independent Timber Sale area (SBA set-aside program). Additionally, 19 Chatha Area VCUs are within the Independent Sale area. To meet th SBA committment of 30 MMbf (Chatha Area's share of the Tongass National Forest's 80 MMbf annual committment) these VCUs will be eventually programmed for harvest. That alternative was determined in TLMP. What remains are the variou alternative cutting patterns, LTF locations, roading systems, camp locations and timing of harvests.

3. Proposed development will essentially pose no impacts to the important salmon and crab rearing, spawning and harvest areas in Gilbert Bay. The timber harvestin practices as well as the road construction methods which will be required for this sale, ensure tha no significant additional amounts of sediment will be allowed to impact the waters of Gilbert Bay. The Whiting River currently deposits significant amounts of glacial caused sediment into Gilbert Bay. These sediment loads spread out across the entire bay and are often seen as far as Port Snettisham and out into Stevens Passage.

Additionally, glacial sediments from the Speel River have been observed coming the full length of Speel Arm, a distance of approximately 13 miles. These sediments add to the already heavy naturally occurring sediments depositing in this estuary. Any amounts generated by timber harves or road construction activities would be insigificant when compare to the amounts generated by the tw glacial rivers.

No development will occur in Sweetheart flats. Mitigation measures planned pursuant to the Chatham Area Project Guidelines (copy available upon request) and the Southeast Alaska Area Guide, ensure that resource values such a those in Gilbert Bay will receive full protection from environmenal impact.

RECREATIONAL DEVELOPMENT

13 The Senate version of HR-39 has proposed up to 160 acres for recreation facilities development within the proposed wilderness area. It is not clear from the statement what discretion and options the Forest Service will have if this bill is enacted. It may be premature to anticipate the provisions of the bill as they relate to recreation facilities development by presenting an impact statement including alternatives that may or may not be possible. The Forest Service should explicitly state that alternatives D, E, F, and G contain provisions which violate the current land management plan by allowing concentrated recreational development. If in fact concentrated recreational development is feasible, what will be the mechanism by which the LUD-II can be changed? Since the LUD-II assigned to the Holkham Bay area was subject to public input and review, the DEIS should state how the public will be involved in the new planning process to determine the appropriate level of recreational development, once statutory direction is clear.

14 The DEIS does not adequately analyze the current need for concentrated recreation facilities. Information that should be provided includes the location of other developed recreation facilities in the area, the intensity of use at the other facilities, and whether private developers have expressed an interest in providing the levels of service that are proposed in the DEIS. During the public involvement sessions, no one expressed support for the timber sale or development of commercial recreation facilities in the Gilbert Bay/Holkham Bay areas. Support was expressed for development of primitive recreation facilities such as campsites and cabins.

EPA is concerned that in the identification of the Recommended Action, the Forest Service proposes an additional alternative; parameters setting minimum and maximum development. This alternative was not presented in the impact statement as an alternative and therefore was not part of the environmental analysis.

Environmental effects as presented in the DEIS are overly simplified and general. More detail as to construction impacts, sewage disposal, fuel handling, planned mitigation measures, and other secondary impacts resulting from development is necessary. Without an assessment of environmental impacts of the proposed action, which may allow development to accommodate 150 persons, EPA cannot agree that the lodge/resort facility development "would cause minimal adverse environmental impacts."

15 If and when a private resort operator submits a proposal for development of a recreation facility, an environmental impact statement that specifically addresses that proposal and reasonable alternatives would be necessary.

Alternative C is consistent with existing and future management objectives and would enhance public use. It would cause the least adverse impacts on wilderness values, wildlife, soils, fisheries, visual, and cultural and was identified as the environmentally preferrable alternative. EPA supports the implementation of Alternative C.

CONCLUSION

EPA believes that the Draft Environmental Impact Statement for the Gilbert Bay/Holkham Bay Area contains insufficient information to permit a reasonable review of project features considered in the DEIS. We have therefore rated this statement 3, inadequate information. The DEIS fails to provide information to permit an evaluation of primary effects and significant secondary effects. We recommend that several alternative locations for the timber sale be presented in addition to alternatives A and B. As presented in the DEIS, we have environmental reservations regarding the potential impacts of the preferred alternative B. Additional information regarding soil stability, adverse noise and disturbance effects on the adjacent wilderness area, and mitigation measures to avoid adverse impacts to the very high wildlife, fisheries, and high productivity values is necessary. EPA believes that the "no action" alternative would be desirable for the present planning period.

16 Because the recommended action for recreation facilities development is not analyzed in the statement, a basis does not exist on which to make a determination regarding environmental impacts. We recommend waiting until Senate Bill HR-39 has been passed and finalized before attempting further impact analysis. A feasibility study should then be conducted to determine the public need and economic feasibility of varying levels of recreation facilities development. Alternative sites such as Sumdum, Harbor Island, and Williams Cove should be

4. Soil suitability and capability maps are available by request should you desire to determine for yourself the risks of developmental activities as related to soil and slope conditions.

5. Our current methods of yarding and minimum environmental impact road location, design and construction requirements along with the mitigation and monitoring requirements during and following timber harvest, will prevent any significant long-term impacts to the soil resource.

6. The "adverse" mileage referenced actually means where loaded log trucks are required to go uphill on the way to the log transfer facility. It is more economical if a road can be located and designed so that its entirely a downhill pull once the trucks are loaded.

There will be no unreasonble disturbance to streambanks, especially where any instablity is apparent. The special mitigation measures references are contained in the "Chatham Areas Project Guidelines" which detail prescriptive measures to be employed in these types of situations. A copy of the Guidelines is available upon request.

7. There are 60 to 80 acres to be harvested in this slope class. Please see Section V, Mitigation Measures.

8. None of the bridges would be visible from Gilbert Bay or from Williams Cove due to vegetative screening.

9. The planned pattern of harvest units are not continuous. The average distance between harvest units is at least 1400 feet, with the maximum distance 2400 feet and the closest units are approximately 400 feet apart.

10. Refer to Letter 9, response 11.

The blowdown question is a concern. The design of each buffer strip will keep blowdown to a minimum. Biologists will make recommendations as to what course of action will be taken should large amounts of blowdown occur in any of the buffer strips.

Based on public opinion, compatibility with wilderness values, the LUD-II of Williams Cove, and the need to protect wildlife, waterfowl, fisheries, and visual values, EPA favors Alternative C.

The Environmental Protection Agency has rated this draft EIS ER-3. ER indicates that we have "environmental reservations" regarding the proposed actions. The 3 rating indicates that inadequate information is provided and that additional information is necessary in the final statement. This rating will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act, as amended.

We appreciate the opportunity to review this draft environmental impact statement and to express our views and comments. Please feel free to contact me or Scott Berg of my staff, if you have any questions or concerns regarding our comments. We may be reached at (206) 442-1285 or (FTS) 399-1285.

Sincerely,

David Steinborn, for

Roger K. Mochnick, Acting Chief
Environmental Evaluation Branch

---

11. The road network around the estuary is not expected to be a significant hinderance to the movement of wildlife. In fact, a great many observations along existing road systems throughout the Tongass have shown that a lot of wildlife including bears, deer, wolves, birds of many kinds, and numerous other species, frequently cross roads, walk down them, and also appear to use roads where breezes reduce insect numbers as a place of refuge.

The logging camp will not be within a wildlife retention zone as planned in the Recommended Action.

Should wildlife populations become depressed, the State has the authority to limit or close hunting, trapping, and fishing regulations.

12. Please see response number 3 above. Tremendously high natural sediment levels presently being introduced to this system from glacial sources far outweighs any possible man-accelerated erosion processes. The Forest Service does not anticipate degradation of the wildlife, fisheries, visual or water quality values nor destruction of the opportunity to enjoy the areas recreation and aesthetic qualities. Rather, creating access will provide the opportunity for expanded use of this part of southeast Alaska's forest. In light of the TLMP allocation process, and even though timber values are average for the commercial forest lands of the Tongass, the Forest Service has determined that the timber value of Gilbert Bay valley is of enough importance to warrant the proposed sale.

13. The Administration's position for wilderness in southeast Alaska excludes the LUD II area in Williams Cove. The Tongass Land Management Plan provides for recreational development in the Williams Cove - No Name Cove area which is adjacent to Tracy Arm and across from the mainland portion of the proposed wilderness.

14. The proposed commercial recreational development is not in violation of the current land management plan. Please see p. 24, Management Area C-12 Management Direction and Emphasis, part 2, TLMP FEIS, March 12, 1979. There is no need to change the LUD II classification of the Williams Cove-No Name Cove area. The DEIS does show (Appendix B) the resolution passed by the Juneau City/Borough Assembly requesting that opportunity be provided for the recreational development. Also, the record of public involvement from the formulation of TLMP is available upon request and this record documents similar requests.

15. The Forest Service feels that the impacts from the development of a resort/lodge complex are adequately addressed in this Environmental Statement.

16. As mentioned in response 1 above, alternative timber sale areas are addressed in TLMP. Because of the high (over 2,000 feet) ridge separating the timber harvest area from the proposed Tracy Arm-Fords Terror Wilderness, and the two to three miles of saltwater on the other side, noise from development activities will cause no disturbance within the proposed wilderness area.

LETTER 13

TELEX: 099-45-350
PHONE: (907) 747-2265

ALASKA LUMBER & PULP CO., INC.
P.O. BOX 1050 • SITKA, ALASKA 99835

CHATHAM
[illegible] 05 '80

walk

May 2, 1980

Mr. William Gee
Forest Supervisor
U.S. Forest Service
Chatham Area
P.O. Box 1980
Sitka

Dear Mr. Gee:

Personnel at Alaska Lumber and Pulp Company have carefully reviewed the Draft Environmental Impact Statement "Proposed Recreational Development and Independent Timber Sale - Gilbert Bay/Holkham Area, Southeast Alaska". ALP agrees with the U.S. Forest Service that the major issues including recreation, fish and wildlife concerns, timber harvest, visual, wilderness, and socio-economic have been adequately identified in the Draft Environmental Impact Statement. This identification includes sufficient information to address decision variables and determine appropriate conclusions when one takes into account the significant amount of investigation and background data which has been accumulated prior to arriving at recommendations.

Issues of particular concern to ALP include timber harvest and socio-economic. ALP supports the need for action on the Tongass National Forest to assure that there is a minimum average annual harvest of four hundred and fifty million board feet provided for the decade. It is very important that the economy of the region, which is substantially sustained by the forest products industry, be assured of future stability through the provision of adequate amounts of commercial volume from the Tongass National Forest. Therefore, the development activities envisioned for the Gilbert Bay/Holkham Bay area are of utmost importance to the industry and population in the region.

The second area of concern involving the socio-economic data adequately displays the benefits to be derived from the sale of thirty million board feet of commercial volume plus benefits derived from limited recreation development for potential future visitors. Again, ALP supports the socio-economic analysis which substantiates the need for providing the Southeast Alaska region with a stable economic base in order to support the present population.

ALP agrees with the U.S. Forest Service that the most logical method of timber harvest development would be to implement Alternative B starting in 1980. Alternative B comes closest to meeting the needs of resource users whether they are involved in timber harvest, recreation, mining, etcetera. In addition, Alternative B provides for further recreation development if that is warranted in the future due to public demand sufficient to attract private investment as appropriate.

On behalf of ALP, I appreciate having the opportunity to make comments and urge that the recommended action be implemented.

Sincerely,

ALASKA LUMBER AND PULP COMPANY, INC.

Pete Huberth

Peter M. Huberth
Resource Coordinator
WOODS DIVISION

PMH:mmm

cc: J. Rynearson
D. Soukup

TER 14

HAINES BOROUGH
P.O. BOX H
HAINES, ALASKA 99827
(907) 766-2711

il 80

Information Officer
orest Service
s NF-Chatham Area
80
Alaska 99835

RE: Draft Environmental Impact Statement
Gilbert Bay/ Holkham Bay Area, Southeast Alaska

ir:

The Haines Borough Assembly wishes to go on record porting a sale of no less than 30 million board feet from the t Bay/ Holkem Bay area for two reasons:

1. such a sale is economically necessary for the uation of a viable local timber industry; and

2. the timber available is overripe and, for the nation of the forest, it should be cut.

ely yours,

A. Tengs
an, Haines Borough Assembly

s

ohn Schnabel

TTER 15

United States
Department of
Agriculture

Soil
Conservation
Service

Professional Center - Suite 129
2221 East Northern Lights Boulevard
Anchorage, AK 99504 (907) 276-4246

April 14, 1980

RECEIVED
APR 15 1980
CHATHAM AREA

.A. Forest Service
ss National Forest - Chatham Area
Box 1980
, Alaska 99835

Public Information Officer

Gilbert Bay/Holkam Bay Recreational Development and Timber Sale

ve reviewed the draft EIS and no comments.

th E. Long
Conservationist

Administrator, SCS, Washington, DC

CHATHAM
[illegible] 15 [illegible]
F.S.
A.O.

LETTER 16

1789

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

April 7, 1980

Dear Mr. Gee:

Thank you for forwarding a copy of the draft environmental impac statement Part I and II of the Proposed Recreational Development and Independent Timber Sale, Gilbert Bay/Holkham Bay Area, Southeast Alas This Department has no comment on the Statement.

Sincerely,

Anthony V. DiSilvestre
Assistant Director (Environmental Progr
Office of Administrative Programs

Mr. William Gee
Forest Supervisor
USDA Forest Service
Tongass National Forest - Chatham Area
P.O. Box 1980
Sitka, Alaska 99835

CHATHAM
[illegible] 11 [illegible]
FS
AO

LETTER 17

United Southeast Alaska
GILLNETTERS
P.O. BOX 1186
JUNEAU, ALASKA 99802
"DEDICATED TO THE PROFESSIONAL FISHERMAN"

CHATHAM
JUN 5 '80

May 29, 1980

William P. Gee
Forest Supervisor, Chatham Area
Tongass National Forest
P.O. Box 1980
Sitka, Alaska 99835

Re: Proposed Recreational Development and Independent Timber Sale
Gilbert Bay, Holkham Bay

Dear Mr. Gee:

Our organization recommends a No Action alternative to this draft Environmental Impact Statement because we do not feel that two important issues have been addressed satisfactorily. These issues are independent timber sale programming and fisheries protection.

We are very disappointed that the independent sale program
was not identified as a major issue and concern in the introduction
to this DEIS. This was clearly brought up as an issue and concern
at the public involvement meeting in Juneau. We stated that we were
not only concerned about the impact to fisheries of a 30 MMBF sale in
Gilbert Bay but that we were also concerned about where future sales
1 totaling 30 MMBF would be occuring in order to meet this commitment.
The Chatman Area Independent Sale Program Review (Appendix E) does
little to calm our fears that most of the mainland watersheds will
eventually have to be logged in order to meet independent timber sale
commitments. We fish in terminal areas in the Chatham area; this
means that we are very dependent on the mainland system to provide
harvestable surpluses of salmon. It is discouraging to find that the
issue of long range independent timber sale programming is not addressed in the DEIS because our organization made a point to bring it up
at the public involvement meeting held in Juneau.

The other reason why our organization has recommended a No
Action alternative is because of the inadequate alternatives for
fisheries protection displayed in the DEIS. There are no major
differences in the timber unit layout between Alternate A+ B.
2 By giving the fishermen no real choice in fisheries protection
alternatives you are in effect stating that fishermen have no real
input into decisions which will directly affect their livelihood.
The message you have sent us in this DEIS is very clear -- "We have
decided to take 30 MMBF out of the Gilbert Bay - Holkham Bay and
this is the way we're going to do it."

After looking at the maps and reviewing the text of the DEIS,
we feel that there are a number of alternatives for better fish
protection that could have been made and that there should have
been more information displayed so as to give the alternatives
3 greater meaning. For example, the timber alternatives for harvesting
units 24 and 25 show roads paralleling both sides of the stream.
Considering the soils hazards that road construction can encounter

RESPONSE TO LETTER 17
(United Southeast Alaska
Gillnetters)

1. The Tongass Land Managemer
Plan (TLMP) is quite specific
its identification of the area
where timber harvesting activi
are planned to occur during th
ten year life of the plan. Wh
TLMP does not state specifical
the volume of timber to be rem
from each Independent Timber S
area, the Forest Service maint
on file, five year timber harv
action plans which provide thi
information. These plans are
available upon request.

2. Although there are no majo
differences between the timber
harvest unit layout proposed
Alternatives A and B, all clea
units were laid out with maxim
protection to the fisheries
resource. In addition, the
Recommended Action has been
revised to locate the log trar
facility in Williams Cove in c
to provide maximum protection
the important estuarine
environment in Gilbert Bay.

3. The maps in the DEIS
indicating a logging road
paralleling both sides of the
stream adjacent to units 24 ar
is a graphic error. The two
parallel sections of road are
located on the south side of t
stream in order to minimize

The maps indicate a large amount of streamside cutting on stream 111-35-32 (Unit 15). The DEIS has failed to give adequate information with respect to one; how much of this stream fish can utilize and two; is this stream temperature sensitive. Without this type of information it is difficult to say whether or not an alternative to this proposed unit is necessary to protect fish habitat.

Unit 22 is intersected by stream 111-35-34. The text states that the road crossing is near the upper limit of available fish habitat. Since Unit 22 is situated just above the crossing does fish habitat occur within the unit and can the unit be logged without damaging fish habitat? Unit 14 looks like it borders the stream on the maps. The text states that buffer strips will be provided. Could you tell us how wide a buffer strip is planned for this unit?

The road crossing for stream 111-35-36 occurs near the upper limits of fish habitat. Is there an alternative that considers crossing the stream well above fish habitat?

Of course, it goes without saying that we favour an alternative that prevents log dumping and log storage in Gilbert Bay.

One final point, we think that the statement (page 18) that logging and roading generally cause no significant long-term impacts to fish habitat and populations should be deleted. We know of no Forest Service studies in southeast Alaska that can support the statement at this time.

In summary, we do not feel that our concerns regarding independent sale programming and adequate timber harvest alternatives to protect fish habitat were adequately addressed. Therefore, at this time we support a No Action Alternative.

Steve Hoavig
Executive Secretary

4. A windfirm buffer will be provided between unit 15 and the adjacent stream to protect the fish habitat.

5. A barrier falls is located just downstream from unit 22. Thus, the portion of the stream running through unit 22 is not available fish habitat. This un will be harvested by a cable harvesting system with full suspension capability. As a result, logs will be lifted ove streams, thus avoiding streamba degradation and protecting downstream fish habitat.

6. A windfirm buffer will be provided between unit 14 and the adjacent stream. The width of this buffer will be determined during the on-the-ground unit layout process in order to provi maximum protection to the fisheries resource.

7. The road crossing stream 111-35-36 is located to provide maximum protection to fish habitat. Locating the road further uphill on steeper slopes would result in potential advers impacts to the fisheries resourc from stream sedimentation.

8. The Southeast Alaska Area Guide and the Chatham Area Proje Guidelines provide direction for the prevention of long-term fish habitat degradation. These guidelines have been used and wi continue to be used in the planning and implementation of t Recommended Action.

PPENDIX M

IRFIELD SUITABILITY-RECREATION ALTERNATIVES F ND G

n airport to accommodate Boeing 727 type ircraft is anticipated to cost $8-10 MM ncluding navigation aids. The assigned minimum eiling would be above 2000 feet. If an pproaching craft did not have visual ground ontact at the minimum ceiling, a missed pproach would be mandatory. As a result, there ay be many flights that would be unable to land t this site according to FAA, due to adverse eather conditions.

ny airstrip located in Gilbert Valley could be xpected to experience significantly higher elocity winds than one located near No Name ove due to the "venturi effect" through the alley. This is characteristic of short, unnel-shaped valleys open on both ends and is emonstrated by Tongass Narrows at Ketchikan. n airstrip to accommodate aircraft of the twin tter type is viewed by FAA as realistic for ttainment. This type of operation would equire a level of navigational aids, as this ircraft operates on instruments and requires a uidance approach. The minimum ceiling would be xpected to be approximately 1000 feet.

he approach to a Gilbert Valley field with inds southerly would require a route from the orth following Port Snettisham, turning 90 egrees right at the entrance to Gilbert Bay, nd then straight in. This would be a recarious approach considering the surrounding errain elevations.

he approach to a No Name Cove field with winds outherly could be executed down wind (from the outh) until visual contact with the ground is btained over Harbor Island. There is ufficient room at the confluence of Tracy and ndicott Arms to execute a turn and land at No ame Cove from the north.

s both airfields are in the proximity of bird esting and resting grounds, the potential xists for airplane/bird inflight collisions. lthough not serious in the case of slower iston aircraft, a high level of danger exists or jet aircraft.

APPENDIX N

REGULATIONS AND INVENTORY METHODS

Soils

Regulations and Guidelines - National and departmental directives call for protection of the soil resource and development of guidelines for mitigating both direct and indirect soil impacts. Timber harvest on National Forest land is to be considered only where:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged.

2. There is assurance that such lands can be adequately restocked within five years after harvest.

3. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from deposits of sediment likely to seriously and adversely affect water condition or fish habitat.

Inventory Methods - a detailed (third order) soil inventory was conducted over most of the study area. Soil delineations are based on physical soil characteristics, vegetative cover, and geomorphic features. Interpretations with regard to timber management, productivity potential, wildlife habitat suitability, road construction capabilities, and slope stability have been developed for each soil type.

V-notch dissected and steep slopes within proposed cutting unit boundaries have received additional field evaluation. Studies of slope stability and susceptibility to harvest damage have been conducted over much of the area.

Air Quality

Guidelines and Regulations - Environmental Protection Agency standards include primary standards for public health and secondary standards for the general welfare. The State of Alaska has adopted secondary, or Ambient Air Standards, which are the more rigorous air quality requirements. These standards require monitoring of particulate matter and sulphur dioxide pollutants in the ambient air.

Water Resource

Regulations and Guidelines - in 1972, Congress passed amendments to the Federal Water Pollution trol Act (PL 92-500). This law authorizes State to establish water quality standards pollutant discharge limitations applicable all waters of the State. These standards e established in October, 1973. Authority also given to prevent, control, and abate point source pollution through enforcement of se standards.

point source pollution was to be abated by t Management Practices (BMPs) developed by d management agencies. BMPs are being eloped by the Department of Environmental servation, the Department of Natural ources, and the USDA Forest Service from data ained by monitoring current forest land agement activities. BMPs are presently umented by the Forest Service in the theast Alaska Area Guide and the Chatham Area ject Guidelines.

entory Methods - in compliance with the ional Forest Management Act, third level entories were completed prior to planning.

etation

delines and Regulations - silvicultural tems are regulated according to national ource management guidelines. These laws and ncy regulations require that timber rations on National Forest land be conducted as to give all resources necessary sideration and protection.
se laws include but are not limited to:

1. Knutson-Vandenberg Act of 1930.

2. Anderson-Mansfield Reforestation and egetation Act of 1949.

3. Multiple Use-Sustained Yield Act of 1960.

4. Supplemental National Forest orestation Fund Act of 1972.

5. Forest and Rangeland Renewable Resources of 1974, as amended.

6. National Forest Management Act of 1976.

entory Methods - overall timber volume and position of the timber resource on the gass National Forest had been inventoried in ent years. The TLMP process established imates of timber volume and operability. The est has also been species and volume typed strata on aerial photos, with results mapped. With these volumes and data as a general guide, more intensive work was performed in the field during 1979. Field data leads to a more accurate representation of conditions as found in Gilbert Valley.
Field data collected in 1979 includes: Silvicultural stand examination; fall buck and scale; timber cruise.

Recommendation to the Smithsonian Institution of sensitive plants which may merit classification as threatened or endangered is the responsibility of the U.S. Fish and Wildlife Service in Alaska. Preliminary plant studies of the Tongass and Chugach National Forests were completed in 1978; the second phase of the study which includes search for living specimens, began in 1979. Based on this study, a sensitive plant list will be developed in accordance with Forest Service policy in Region 10.

Fish and Wildlife

Wildlife Guidelines and Regulations - management of the fish and wildlife resources on the Tongass National Forest is conducted cooperatively with the State of Alaska and other Federal agencies under direction of National legislation, departmental policy, and State regulations.

The Endangered Species Act of 1973 (PL 93-205) is the basis for departmental and agency policy which provides full protection for all fish, wildlife, and plant species classified as threatened or endangered for this area.

A memorandum of agreement between the Forest Service and the U.S. Fish and Wildlife Service provides for a 330-foot buffer zone around all eagle nest trees, as well as clusters of perch trees every 100 yards along the shoreline.

Fisheries Guidelines and Regulations - management of the fishery resource is directed by Federal legislation and departmental regulations. In addition, agency agreements and legislative direction discussed for management of the wildlife resource are observed in fishery management programs wherever applicable.

Inventory and Data Collection - four methods were used to gather information on fish and wildlife habitats. They were:

> Use of TLMP data, including fish and wildlife rating forms and computer compilations of information. This source provided VCU information concerning fish and

wildlife values, current human use patterns, special or unique areas, and percent and acreage of habitat within each land unit.

Personal contacts were made with other resource agency personnel to obtain additional information not available in routine literature searches and on-site inspections.

Examination of aerial photographs. This method was used to identify potential critical habitat in conjunction with on-the-ground observations.

Examination of areas proposed for cutting units, road location, camps, or log transfer site. Field investigation was limited to those areas where activities were proposed, with priority given to areas where resource conflicts were suspected.

These areas will receive additional field surveys in the 1980 season.

Visual Resource

Guidelines and Regulations - the Forest Service Visual Management System is outlined in USDA Handbook No. 462, Volume Two, Chapter One - The Visual Management System; and Forest Service Manual 2380. This program establishes the visual landscape as a basic forest resource.

Inventory Methods - an inventory using the Visual Management System (see glossary) adopted by the Forest Service was done throughout the study area. Landscape variety classifications were determined through on-the-ground survey, aerial photograph interpretation, and flight reconnaissance. Visual sensitivity levels were determined through verification of small boat, ferry, and tour ship routes. Areas seen by forest visitors were determined by manual topographic analysis.

Cultural Resources

Guidelines and Regulations - the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966, and Executive Order 11593 require that information on cultural resources within impacted areas must be compiled. Procedures for the evaluation and protection of all known cultural resources are set forth in 36 CFR 800.

Inventory Method - Surveys were conducted in 1979 and 1980 at Gilbert Bay; Holkham Bay, including Round Islet and Harbor Island; No Name Cove and Williams Cove. This included literature research, site reconnaissance, and intensive site investigation and recording of high potential cultural areas.

Recreation And Wilderness

Guidelines and Regulations - Forest Service management of recreation and wilderness resources is outlined in the Forest Service Manual 2300 chapter. Guidelines and land allocations developed in the Tongass Land Management Plan served as a basis for considering management options. Legislation currently pending in Congress that would affec management decisions in this area was also considered.

Inventory Methods - several methods were utilized in developing an inventory of recreation and wilderness resources and use patterns. Existing resource reports, which included field inventory and analysis, were reviewed and are listed under references cited (Appendix O). Information resulting from the public involvement process contributed to the data base. Contacts with the Alaska Division Tourism and the Alaska Marine Transportation System assisted in assessing existing and futu visitor use.

APPENDIX O
REFERENCE MATERIALS CITED AND USED

The labels which follow identify both material prepared by the Forest Service and those non-Forest Service documents which were used by the Interdisciplinary Team in preparing this Environmental Impact Statement.

Interested individuals are encouraged to contact the agency to obtain further information. In some cases, material can be provided by mail. In other instances, it will be necessary for the reviewer to visit the Forest Service office in Sitka to examine referenced data.

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APPENDIX P

GILBERT BAY/HOLKHAM BAY CULTURAL RESOURCE INVESTIGATIONS CHATHAM AREA, TONGASS NATIONAL FOREST

PROPOSED RECREATIONAL DEVELOPMENT AND INDEPENDENT TIMBER SALE

Literature search reveals a number of cultural sites, both confirmed and unconfirmed, within the Gilbert Bay/Holkham Bay areas of potential impact and development (Appendix O).

The State Historic Preservation Officer was contacted in compliance with 36 CFR 800.4 to determine whether there were any recent additional sites listed on the Alaska Heritage Resource Survey Index (Appendix Q). On-the-ground investigation revealed no additional sites within the impact areas.

In the 1979 field season (Davidson, Fields' Cultural Resource Investigations at Gilbert Bay, 1979), Archaeological clearance was given to the Gilbert Bay area for recreation and timber sale development. This includes proposed cabins, resort/lodge development, log transfer sites, and logging camp locations.

During the weeks of May 20-25, 1980, Chatham Area archaeologist Stanley D. Davis and archaeological technicians Martin Stanford, Theresa Thibault, and Mary Brom resurveyed the Gilbert Bay area and conducted the first survey of the Holkham Bay areas paying particular attention to those areas proposed as alternatives for recreational development and timber sale.

The survey areas extended from the head of Williams Cove south along the eastern shoreline to the southeastern-most tip of the Snettisham Peninsula (survey area #1). These areas were surveyed to determine whether any cultural resources would be impacted by proposed developments.

Also surveyed were Harbor Island and Round Islet located southeast of the Snettisham Peninsula in Holkham Bay. Survey of these islands consisted mainly of beach and immediate inland areas (approx. 50m inland).

Within the boundaries of the Survey area #1 a total of seven historic structures were found. Between the No Name Cove area and the head of Williams Cove a large number of pitch cut trees were located indicating past seasonal use of the area; however, no seasonal and/or permanent camps or villages were encountered by this survey.

Of the structures located in survey area #1, three are within the No Name Cove area which is proposed for possible recreational development in the Recommended Action. These structures are of very recent origin (less than 20 years) and the impact on these structures would be negligible. No middens, petroglyphs, or other cultural indicators were observed, therefore the area can be given archaeological clearance for recreational development.

The remaining four structures are all located at the southeast tip of the Snettisham Peninsula and are designated site #49 SUM 27. As this area is not proposed for recreational development, no direct impact is anticipated. This area can be given archaeological clearance for recreational development as well as the two proposed (Alternative A) log transfer sites in Williams Cove. Refer to Section V, Effects of Implementation, Mitigating Measures and Management Requirements.

The Round Islet survey (survey area #2) confirmed the existence of historic structures designated site #49 SUM 29 (Sealaska Corp. 1975). This area was tested and cultural materials were recovered. Also confirmed at Round Islet was the existence of three fox trap houses located at the northern section, central cove, and southeast tip of the island. These structures are thought to be directly linked to the fox farm operation located on Harbor island (survey area #3).

Harbor Island was surveyed completely around its circumference at the shoreline and back into the timber areas just beyond the beach. Areas were a water supply was available were noted. The whole of Harbor Island was utilized for fox farm activities as evidenced by the location of nine fox trap houses located around the island in various small coves, as well as by an extensive pen area located behind several abandoned living quarters and processing structures on the southeastern portion of the island.

The historical significance of Harbor Island is evidenced by the nearly complete material remains of the fox farm operation on the island and is representative of the colorful, if brief, fox farming era in southeastern Alaska.
Because of the historical importance of the fox farm on Harbor Island and the presence of the Native occupation site at Round Islet, archaeological clearance cannot be given to either of these areas for recreational development of any kind due to the adverse effects which could seriously damage the existing structures.

PPENDIX Q

NSULTATION WITH ALASKA STATE HISTORIC
ESERVATION OFFICER

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
TNF-CMA

TO: 2360 Special Interest June 2, 1980

CT: Gilbert Bay/Holkham Bay-Proposed recreational development and independent timber sale

TO: Tom Walker IDT Core team leader

On May 28, 1980 the Chatham Area Archaeologist Stanley D. Davis consulted the acting State Historic Preservation Officer (S.H.P.O.) Doug Reger and presented an outline of the proposed Gilbert Bay/Holkham Bay Timber sale and Recreational development plan.

Along with the outline for the planned development I presented the findings of the archaeological investigations which included a literature search of existing information and the results of the on-the-ground survey of the area involved. The survey and literature reasearch revealed three sites: 49 SUM 27, 49 SUM 29, and 49 SUM 30.

After a discussion of the recommended alternative it was decided that the planned activities would have no effect on the cultural resources in the project area. Mr. Reger did want included the recommendation that "if any other than the planned alternatives were adopted we desire further consultation".

Follow up documentation will be forwarded to the S.H.P.O. and then will be kept on file in the Chatham Area office of the Tongass National Forest.

Stanley D Davis
Stanley D. Davis
Chatham Area Archaeologist
Tongass National Forest

SDD/tt

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